Welcome Students!

Union County College welcomes you.

We refer to this as a “Catalog,” but you can consider this your “On-Time Graduation Guide.”

Graduating on-time means earning the credits you need for a degree or certificate in less than three years. At Union County College, we are committed to helping you achieve this goal. Our faculty and staff do not simply pay lip service to our “Students are Number One” motto. We live it, we believe it, and we take pride in delivering on the promise of a great community-college education.

As you will see, the Catalog provides detailed information about what you need to know to be a successful student at Union. Please pay particular attention to the Academic Policies section, which outlines academic requirements such as grading.

The “Programs of Study” section provides a step-by-step roadmap for your chosen program of study. You will find over 60 academic programs from which to choose, as well as a semester-to-semester track to a degree or certificate.

Graduating with an Associate of Arts or Associate of Science degree at Union will enhance your opportunity to transfer seamlessly to a four-year institution, especially within the New Jersey system. Completing the requirements of an Associate in Applied Science degree will also help you to enter directly into a career when you graduate.

You are about to begin what we hope will be a successful year. We promise to do whatever we can to help you get started, stay on track, and achieve your individual educational goals. We have many resources available to help you succeed, from academic advising, assistance with financial aid, and free peer-to-peer tutoring in the Academic Learning Center. Your success is our success.

Thank you for choosing to further your education at Union County College as we continue our mission of transforming our community, one student at a time.

Sincerely,

Dr. Margaret M. McMenamin
President

Union County College 2021-2022 Catalog      www.ucc.edu
Take 15 credits each semester. This is the way to graduate in two years with an Associate Degree. By taking advantage of the College’s “flat-rate tuition,” a full-time student can take 15 credits and be on the fast track to earning their Associate Degree at the same price as taking 12 credits a semester.
Union County College

Union County College is a public comprehensive community college providing quality, affordable, accessible educational programs that serve the greater Union County region. It is the first of New Jersey’s 18 associate degree colleges and has been serving both career-minded and transfer-oriented students since 1933. The College operates major campuses in Cranford, Elizabeth, and Plainfield, and has satellite locations in Scotch Plains and Rahway. It enrolls almost 20,000 credit, non-credit, and continuing education students and is accredited by the Middle States Commission on Higher Education.

Many programs lead to an Associate in Arts, Associate in Science or an Associate in Applied Science degree. The College also offers cooperative nursing programs with the Trinitas School of Nursing in Elizabeth, New Jersey, and JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging in Plainfield, New Jersey.
History

Union County College has a remarkable history as the oldest of New Jersey’s community colleges. The College began in 1933 as a one-room night school and has been known through the past almost 90 years as Union County Junior College, Union Junior College, Union College, and now as Union County College, a comprehensive community college serving almost 20,000 credit and non-credit students in Union County, New Jersey.

U.S. President Franklin D. Roosevelt founded Union County Junior College as an “emergency junior college” through the federal Works Project Administration with the original mission of providing jobs for unemployed teachers and professors.

By 1936, the College became Union Junior College, an independent, non-profit, degree-offering institution governed by a Board of Trustees. In 1967, the College became Union College and in 1982, the College merged with the County-funded Union County Technical Institute to form Union County College. The merger included the establishment of a Board of Governors to act in an advisory capacity.

The new Union County College is an open-access community college that currently offers over 60 associate degrees and certificate programs, as well as noncredit opportunities for continuing education and workforce development. Union has campuses in Cranford, Elizabeth, Plainfield, Scotch Plains, and an academic presence in Rahway. In addition to its traditional in-person classes, the College offers the option of taking classes online with a robust offering of online courses and 20 fully-online degree programs.

More than half of the College’s students are enrolled at the suburban Cranford campus. The urban Elizabeth campus is in the heart of New Jersey’s fourth largest city where more than 40 percent of the College’s students take classes.

The Plainfield campus doubled its footprint in 2015 when it opened the Health Sciences building with state-of-the-art labs for the Practical Nursing, Emergency Health Science, and Paramedic Programs.

The Cranford campus expanded in 2016, thanks to the Union County Improvement Authority. The two-story Student Development Building, an extension of the historic Nomahegan Building, houses a wide range of student services on the first floor in the Helen E. Chaney Student Services Center, named for the generous donor and alumna Helen Chaney, ’48. The second floor has classrooms and faculty offices.

The Plainfield campus Annex Building re-opened in 2016 after being shuttered for four years by a fire and contains a library, bookstore, cafeteria, and faculty offices.

In June 2017, Union’s accreditation was reaffirmed by The Middle States Commission on Higher Education, a voluntary, non-governmental, membership association that defines, maintains, and promotes educational excellence.

The most recent renovations at the Elizabeth campus were completed in the Lessner Building in 2018. This included the development of a new Student Services Center on the first floor and offices and training classrooms on the lower level for the College’s Center for Economic and Workforce Development.

In November 2019, the College was named one of the top 150 community colleges in the U.S. by the Aspen Institute College Excellence Program. With this acknowledgment, the College is eligible to compete for the $1 million Aspen Prize for Community College Excellence, the nation’s signature recognition of high achievement and performance among America’s community colleges. Only the top 15 percent of community colleges nationwide are invited to apply. The College was chosen based on our strong and improving student outcomes in learning, completion rates, employment rates and earnings, and equity.

In January 2020, the Plainfield campus marked the completion of renovations on the Health Science Building, adding state-of-the-art facilities and labs for the paramedic emergency health science, physical therapist assistant, and respiratory care programs. Training and education in these programs lead to jobs in high-demand healthcare fields.

In March 2020, as COVID-19 hit the United States, the College was forced to adapt in the wake of this global health crisis. The College’s physical buildings were closed with operations and spring 2020 classes moved to a remote format. This transition involved a heavy reliance on technology. While COVID-19 impacted the way in which the College operated and delivered education, the College’s commitment to its mission remains unchanged.

With each new program, opportunity, and modern space for learning, the College is fulfilling our mission of transforming our community...one student at a time!
Mission

Union County College – Transforming Our Community...
One Student at a Time.

Our Mission is guided by our commitment to empower students to achieve their goals by providing access to high quality and affordable higher education to the residents of Union County. As a comprehensive community college with a diverse student population, we provide career programs, transfer programs, developmental education, and lifelong-learning opportunities, with a focus on excellence in all that we do.

Philosophy

Union County College is committed to serving Union County in an environment dedicated to student success. The College has an open admission policy and is focused on educational excellence and the achievement of equity among the various populations served.

The College strives to promote in students a sense of responsibility for their own development and an understanding of their obligations as members of a democratic society. The College fosters in students the desire to learn, the ability to think clearly and express themselves effectively, the habit of analytical and reflective thought, and an awareness of themselves, their heritage, other cultures, and their environment.

Vision

Union County College, with its focus on student success, will be recognized as a national leader within the higher education community in providing quality education.

Values

Union County College embraces these basic institutional values that guide the fulfillment of our Mission:

Student Success – Helping every student to achieve success is our highest priority. We are committed to promoting a climate of student success and to providing an environment conducive to teaching and learning; creating and expanding educational opportunities and support services is paramount to our Mission.

Excellence – We are committed to the highest standards of excellence in all we do; we exemplify this value by providing programs and services that ensure excellence in teaching and learning, student services, and organizational efficiency.

Student Engagement – We are committed to enhancing and promoting student engagement by fully engaging our students as active learners and by providing a broad range of educational experiences both inside and outside the classroom.

Collaboration – We are committed to productive exchanges with all members of the College community and collegial relationships among our various stakeholders.

Integrity – We seek to uphold the highest standard of ethics.

Stewardship – We value and honor the trust placed in us by making wise and efficient use of resources.

Community Engagement – We are committed to encouraging civic engagement and supporting economic development in the region.

Diversity – We are committed to a diverse environment that supports an equitable education for all of our students and emphasizes respect for various cultures and individual differences.

Globalization – We seek to establish connections and relationships locally, nationally, and globally.

Goals

In an effort to achieve the College’s Mission, we strive to fulfill the following goals and to assess them on a regular basis to ensure the quality of our programs and services.

General Education – Provide a relevant and coherent general education for all students. Assess student learning outcomes in scientific/critical thinking and quantitative reasoning; oral and written communication; and information literacy/technological competency.

Transfer Programs – Provide transfer programs for students planning to continue their education at a 4-year institution. Assess student learning outcomes at the course and program level. Regularly evaluate and update courses, curricula, and programs.

Career Programs – Provide career programs to prepare students to enter the workforce and meet workforce needs. Assess student learning outcomes at the course and program level. Regularly evaluate and update courses, curricula, and programs.

Developmental Education – Provide developmental education for underprepared students. Continue to implement approaches that facilitate the progress of students through the developmental sequence. Assess students’ success in college level courses.

Lifelong Learning – Provide courses and programs that encourage lifelong learning and are responsive to the needs of business and industry. Evaluate and update courses and programs, in response to identified needs.

Innovative Pedagogy – Develop, encourage, and support effective and creative approaches to teaching and learning. Regularly assess student learning outcomes.

Student Support Services – Provide appropriate support services for all students that ensure success throughout the students’ college career. Evaluate and update key programs and services in response to student needs.

Resources – Provide the necessary resources, both public and private, to support the institutional Mission. Also, continue to partner with the Union County College Foundation to identify and generate additional resources. Regularly assess the linkage between budgeting and planning.
Accreditation

Union County College is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104, (267) 284-5000. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education. The former Union College was accredited by and admitted to membership in the Association in 1957. Its accreditation was reaffirmed in 1967, 1973, 1982, 1986, 1997, 2002, 2007, 2012, and again in 2017 as Union County College. In 2017, the Middle States Commission on Higher Education acted:

To reaffirm accreditation and to acknowledge the institution’s participation in the Collaborative Implementation Project. To commend the institution for the quality of the self-study process and report. The next evaluation visit is scheduled for 2025-2026.

Union County College was granted the authority by the State of New Jersey in April 1982, to confer the degree of Associate in Arts, Associate in Science, and Associate in Applied Science and to award the certificate and the certificate of achievement. Union College, the precursor to Union County College has held the authority to confer the Associate in Arts degree since 1953, and the Associate in Science and Associate in Applied Science degree since 1969.

Union County College is licensed by the State of New Jersey. Union College had been licensed since 1939.

The following programs hold professional accreditation:

Emergency Medical Studies – The Emergency Medical Technician certification course is approved by the Office of Emergency Medical Services (OEMS) www.state.nj.us/health/ems/)

Radiography – (Joint Review Committee on Education in Radiologic Technology, conducted jointly with JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging);

Respiratory Care – The Union County College Respiratory Care Program, 200628, Associate in Applied Science, Plainfield, NJ Campus holds Provisional Accreditation from the Commission on Accreditation for Respiratory Care (www.coarc.com). This status signifies that a program with an Approval of Intent has demonstrated sufficient compliance with the Standards (through submission of an acceptable Provisional Accreditation Self Study Report (PSSR) and any other documentation required by the CoARC, as well as satisfactory completion of an initial on-site visit), to be allowed to admit students. It is recognized as an accredited program by the National Board for Respiratory Care (NBRC), which provides enrolled students who complete the program with eligibility for the Respiratory Care Credentialing Examination(s). The program will remain on Provisional Accreditation until it achieves Continuing Accreditation.

Physical Therapist Assistant – (American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education);

Professional Nursing – (Accreditation Commission for Education in Nursing, conducted jointly with JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging and Trinitas School of Nursing);

Practical Nursing – (New Jersey Board of Nursing and also accredited by the National League for Nursing Accrediting Commission, now known as the Accreditation Commission for Education in Nursing);

Paramedic Emergency Health Science – The Union County College Paramedic Emergency Health Science Program is accredited by the Commission of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP); and

Diagnostic Medical Sonography – (Commission on Accreditation of Allied Health Education Programs with the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography), conducted jointly with JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging.

These organizations are specialized accrediting agencies recognized by the U.S. Secretary of Education.
Campus Locations

Cranford Campus

The Cranford Campus of Union County College is located at 1033 Springfield Avenue and is situated on 48 acres on the border between the suburban communities of Cranford and Westfield on Springfield Avenue, opposite Union County’s 200-acre Nomahegan Park. The campus is easily accessible car, served by three bus routes of New Jersey Transit, and within a mile of the Cranford Station of New Jersey Transit’s Raritan Valley Railroad line. There are nine major buildings: MacKay Library, Academic Learning Center, and the Center for Visual Arts and Communication; the Humanities, Science, and Nomahegan Buildings with classrooms, lecture halls, seminar rooms, science and computer laboratories, and faculty offices, lounges, cafeteria and faculty dining room; the newest addition to the campus is the Student Development Building which contains lecture and computer classrooms, faculty offices, and the Helen E. Chaney Student Services Center offering one stop model assistance for registration, advising, and support services; the Campus Center with the Roy W. Smith theater, gymnasium, fitness center, Executive Education (teleconferencing) Center, other facilities for student activities, and bookstore; the Victor M. Richel Commons, a student life/student lounge facility featuring an atrium and multilevel floor providing a variety of lounge and meeting spaces; MacDonald Hall, which contains administrative offices; and the William Miller Observatory, which houses a 24-inch reflector and 10-inch refractor telescopes, a lecture room, optical shop, and computer center.

Elizabeth Campus

The Elizabeth Campus is located within the major business district of the City and includes the seven-story Sidney F. Lessner Building at 12 West Jersey Street and the five-story Elizabeth I. Kellogg Building at 40 West Jersey Street. The buildings, including their lower levels, offer classrooms, a theater, lecture halls, seminar and conference rooms, allied health, computer and science laboratories, Kellogg Library and Academic Learning Center, faculty and administrative offices, faculty and student lounges, dining room, bookstore and a Student Services Center and a Career Services Center. Trinitas School of Nursing is also located on Union’s Elizabeth Campus. Both buildings on the Elizabeth Campus are within steps of the Elizabeth rail station of NJ Transit’s Northeast Corridor Railroad line and are served by multiple bus routes serving the City. The College leases 600 parking spaces under a long-term arrangement with the city of Elizabeth in the J. Christian Bollwage garage, which sits in between the Lessner and Kellogg Buildings.

Plainfield Campus

The Plainfield Campus is comprised of almost a city block between East Second and East Third Streets and Church Street and Roosevelt Avenue. The Campus is convenient to Routes 22 and 28, is served by three bus routes, and is two blocks from the Plainfield Station of New Jersey Transit’s Raritan Valley Railroad line. The three-story Logos building contains classrooms, lecture hall, a state-of-the-art laboratory for American Sign Language and Deaf Studies, a student lounge, faculty and administrative offices, computing, testing facilities, seminar and conference rooms. The Annex building contains the Library, Academic Learning Center, offices, bookstore, and cafeteria. The recently renovated Health Sciences Building across Roosevelt Avenue contains instructional space for the Practical Nursing, Emergency Medical Technician/Paramedic Training, Respiratory Care, and Physical Therapist Assistant programs as well as Allied Health labs, student lounge, and faculty offices.

Scotch Plains Campus

The College shares a 40-acre campus located at 1776 Raritan Road with the Union County Vocational Technical Schools and the John H. Stamler Police Academy. Union County College operates two buildings that include classrooms, lecture hall, seminar and conference rooms, allied health and science laboratories, faculty and administrative offices, dining room and Campus Center. The Campus is not served by any form of mass transportation but is convenient to Route 22 and major State routes.
Supporting Organizations

Union County College Alumni Association

The purpose of the Union County College Alumni Association, a nonprofit organization, is to assist in advancing the mission of Union County College, to maintain a continuing relationship between alumni and the College and to strengthen the relationship between the College and the community. The Association hosts social, cultural and educational events and supports Union County College Foundation programs.

Any graduate or former student with 30 credits or more may join the Union County College Alumni Association. For dues of only $15 for three years, or for a Lifetime Membership for $125, you will become a member of a dedicated group who value the education they received at Union. Benefits of membership in the Alumni Association include:

- Membership in the state-of-the-art Union County College Fitness Center at a reduced price of only $25 per semester.
- Free library privileges at all three campuses.
- Opportunities to participate in trips, events, and other projects of the Alumni Association throughout the year

For more information, call (908) 709-7505 or visit the Foundation House at 995 Springfield Ave., Cranford.

Union County College Foundation

The Union County College Foundation was founded by dedicated alumni and community leaders to raise funds to benefit the students at Union County College and to support innovative programs. With over 40 years of work to support student success, the Foundation is proud to report that over the past three years, the Foundation has provide over $3.25 million in scholarship support to our students.

Thanks to the support of our community, the Foundation funds four student success campaigns that have a dramatic impact on student outcomes as well as a food insecurity program to help feed needy students.

- Operation Graduation financially supports the efforts of Union County College’s strategic initiative to increase the overall graduation rates at the College;
- The Close the Gap Fund provides vital financial support to our African-American students who are on track to graduate on-time;
- The STEM Revolution grants resources to our STEM Division while also supporting scholarships for STEM students;
- Inspire the Future aids students of Hispanic heritage by providing scholarship support to help them graduate on-time.
- The Food Insecurity Program provides free breakfasts and helps support the College’s food pantry.

As a non-profit organization, the Foundation receives support from direct contributions, special events and legacy gifts. The Foundation staff manages the day-to-day operations of the organization, and an elected Board of Trustees oversees Foundation committees as well as administers the Foundation’s endowment.

For more information on how you can support the Foundation’s mission, please call (908) 709-7505, e-mail foundation@ucc.edu or visit the Foundation’s website at https://www.ucc.edu/union-county-college-foundation. The Foundation’s Annual Report is available upon request.
Welcome
Welcome to Union County College Student Services Center, where we offer a wide variety of services for new, returning, and transfer students. Our qualified staff can assist students with all of the resources to enroll and be successful in one convenient location on each campus including:

- Applying for Admissions
- Academic Advisement
- Registration for Classes
- Financial Aid and Scholarship Assistance
- College Placement Processes and Testing
- Disability Support Services
- Student Accounts and Billing
- Educational Opportunity Fund (EOF)
- Veteran’s Benefits
- International Student Visas

Your journey begins here and the friendly and helpful staff in the Student Services Center are available to guide you every step of the way. No appointments are necessary.

Admissions Policy
Admission to Union County College is open to all high school graduates, those holding high school equivalency certificates, or those persons eighteen years of age or older.

Application Procedures
Applicants must complete the Union County College Application for Admission. The application for credit admission can be obtained from any of the Student Services Centers at the Cranford, Elizabeth, and Plainfield Campuses or through the College website, www.ucc.edu.

Degree Programs
Students are required to submit the following upon applying for admission to the college:

1. Official high school transcript/G.E.D.
2. Official college transcript, if applicable.
3. Scholastic Aptitude Test, if available.

It is recommended that applicants to all degree programs take the Scholastic Aptitude Test (SAT). The SAT is a test given by collegeboard.com. Acceptance to Union County College programs are not based on SAT scores. Certain SAT scores may exempt students from the placement test or Directed Self-Placement questionnaire and may be required to qualify for selected scholarships at Union County College. It is the student’s responsibility to register for the SAT exam and have the final scores provided to Union County College. Students may visit www.collegeboard.com directly to review registration information [Union County College CEEB Code is 2921].

4. Immunization Records: The State of New Jersey requires all full-time students born after December 31, 1956 to be immunized against measles, mumps, Rubella and Hepatitis B, or prove that they meet one of the exemption requirements. Students must bring a copy of a certificate from a doctor or medical center showing proof of inoculations to the Admissions Office on the Cranford, Elizabeth, or Plainfield campus.

5. Candidates for programs leading to an associate degree are advised to complete 19 units of high school credit distributed as follows:
   a. English                      4 units
   b. Lab Science***             2 units
   c. Mathematics*               3 units
   d. History                    3 units
   e. Foreign Language**         2 units
   f. Electives****              5 units

* Candidates for STEM (Science, Technology, Engineering, Mathematics) programs are expected to have taken elementary and intermediate algebra, plane geometry, and pre-calculus.

** Optional for students entering programs other than liberal arts.

*** Engineering and physical science students should include physics and chemistry; health technologies students include biology and chemistry.

**** Chosen from foreign languages, social studies, science or mathematics. If a student does not have these high school units, non-credit prerequisite courses offered by the College may be required by the selected program of study.

6. Health Science program applicants must apply within the required program deadline date. The programs include Practical Nursing, Physical Therapist Assistant, Paramedic, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, and Trinitas School of Nursing (see Admission to Health Science Programs).

7. JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging applicants must apply directly to the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging; all academic processing will be handled through the School.

8. The Trinitas School of Nursing application for admission must be submitted directly to the Student Services Center at any of the three campuses.

9. After submission of the Union County College application and before enrolling in courses, completion of the Directed Self-Placement (DSP) questionnaire is required for placement in English and Math, unless a student meets the exemption criteria. Students may also be asked to take an ESL test. The results of the test will not affect admission to the College (see Testing and Placement).

10. Applicants with a disability are urged to seek an interview with the Coordinator of Services for Students with Disabilities. The Coordinator is located in the Student Services Center at the Cranford Campus and may be available upon appointment at Plainfield and Elizabeth campuses.
Admission to Health Science Programs

1. Admission to the Health Science programs requires additional selection criteria and may include an admission exam. Health Science programs include: Practical Nursing, Physical Therapist Assistant, Paramedic Emergency Health Science, Respiratory Care, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, and Trinitas School of Nursing.

2. Health Science programs require a passing score on the admission exam.

3. Students in Health Science programs are required to attend an orientation session.

4. Distinct grading policies exist in the Health Science programs which differ from other College courses and programs. Specific information may be found in course syllabi and/or handouts.

5. Health Science policies may supersede College policies.

6. Clinical agencies require that students complete criminal background checks, before entrance into the clinical portion of the Health Science programs. These background checks are completed by an outside vendor and the results will be shared with the school and the clinical agencies. It is the sole discretion of clinical agency personnel to determine if students are able to provide patient care, based upon the results of the criminal background check. Students who are denied clinical placements will be dismissed from the applicable Health Science program.

7. Clinical agencies also require that students have medical clearance. Students will be informed regarding the specifics of the physical examination, laboratory testing and vaccinations that are to be completed by a physician or nurse practitioner.

8. CPR for the Health Care Provider and individual malpractice insurance coverage may be required for clinical patient care experiences. Further information will be provided during program orientations.

Special Admissions Programs

- Advanced and Continuous Studies, A.A.S. Degree
- Cooperative Programs in Professional Nursing, A.S. Degree
- School of Nursing, A.S. Degree
- Trinitas School of Nursing, A.S. Degree
- Paralegal Studies, Certificate of Achievement
- Practical Nursing, Certificate
- Psychosocial Rehabilitation and Treatment, A.S. Degree
- Radiography, A.S. Degree
- Respiratory Care, A.A.S. Degree
- Diagnostic Medical Sonography, A.S. Degree

Testing and Placement

After admission to the College and before enrolling in classes, students must complete the Directed Self-Placement (DSP) questionnaire or meet exemption criteria. The DSP questionnaire is used to determine whether students are prepared for college-level coursework in Math and English. While the results of the DSP questionnaire will not affect admission to the College, it may indicate the need for required developmental courses which must be completed before enrolling in certain college-level coursework.

Students whose native language is not English or who did not attend grammar school or high school in the United States may have to take the English for Speakers of Other Languages (ESL) Test.

In order to complete the DSP questionnaire or ESL Test, a student must have a College identification number and, if testing, present a form of photo identification. There are no appointments to take the ESL test; students may do so on a walk-in basis during the Testing Center’s open hours. Please see the Testing Center’s website for current hours and locations: http://www.ucc.edu/testing

Directed Self-Placement into higher level Math for STEM majors

Students may also self-place into higher level math using the Directed Self-Placement Math questionnaire second set of questions. This may allow students to progress through their program at a faster rate. Placement into specified advanced math courses may require approval from the Dean of STEM.

Union County College requires that the following students complete the Directed Self-Placement (DSP) questionnaire for English and Math:

1. Full-time and part-time freshmen entering Union County College.
2. Students who have not already completed the DSP questionnaire, but who register for courses that would result in the accumulation of 12 or more credits.

Students who meet the following criteria may be exempt from completing the Directed Self-Placement (DSP) questionnaire for English and/or Math*:

1. A student who graduated from high school within the past 5 years with an unweighted GPA of 3.0 or higher and completed 4 years of English and 3 years of mathematics may be exempt from completing the DSP questionnaire. The College reserves the right to evaluate placement upon review of the student’s high school transcript.
2. A student who presents SAT (Scholastic Achievement Test from the College Board) scores of at least 450 in Critical Reading and/or at least 500 in Mathematics will be exempt from the appropriate DSP questionnaire or Accuplacer test.
3. A student who presents ACT scores of 22 or higher in Reading and/or 18 or higher in English; ACT score of 20 or higher in Math will be exempt from the appropriate DSP questionnaire or Accuplacer test.
4. A student who presents PARCC scores of 4 or higher in English/Language Arts and/or 3 or higher in Math will be exempt from the appropriate DSP questionnaire or Accuplacer test.
5. A student who has earned a bachelor’s degree from an accredited U.S. college will be exempt from the DSP questionnaire or Accuplacer test.
6. A student who is transferring in credits for college-level English composition or mathematics from an accredited U.S. college with a grade of C or better will be exempt from the appropriate DSP questionnaire.
7. A student who has satisfactorily completed developmental courses in English and/or elementary algebra at another college may be exempt from the appropriate DSP questionnaire.

* Students will be required to submit official score reports or transcripts to the College based on the specific exemption.

To learn more about the Testing Center, contact us at testingcenter@ucc.edu
International Students Applicants

International students are welcome to apply at Union County College. Students applying with a valid visa other than a student visa (F-1) must submit copies of the visa with the Union County College application. Students applying for a student visa (F-1) must obtain an international student packet from the Admissions Office on any campus.

Application for admission and all required documentation outlined in the student packet must be submitted in its entirety, by the deadline dates. Students currently in the United States with an F-1 Visa from another U.S. institution who wish to attend Union County College must follow the same admissions procedure and will be required in addition to provide:

a. Official transcripts from all colleges or universities attended.

b. An International Student Advisor Report must be completed and signed by the Designated School Official of the current college/university the student is attending.

No decision will be made until all documents are submitted to the international advisor.

Approval of visa status is done through the U. S. Department of Homeland Security Office through Student Exchange Visitors Service and not through Union County College. Students’ acceptance to the College will be based on Visa approval for all F-1 visa applicants.

Effective fall 2016, Union County College will implement an English Proficiency Requirement for applying for the Form I-20. Certificate of Eligibility for F-1 Nonimmigrant Student Status, for prospective students applying from abroad who do not have English as their language, a satisfactory performance on the Test of English as Foreign Language (TOEFL) is required for applying for the Form I-20.

A minimum TOEFL score of 30 on the Internet Based Test is required, or a minimum score of 380 on the Paper Based Test or 3.5 on the IELTS exam is required. Prospective students applying from abroad must submit an official TOEFL score report to the College. The test must have been taken within one year immediately preceding the requested semester of admission. To obtain information on taking the test, visit the following website http://www.toefl.org. The designated Institution code for Union County College is 00264300.

Applicants currently in the United States may take the Union County College’s free ESL placement test administered on campus. All admitted students who have achieved the required TOEFL score may be required to complete the College’s ESL placement test after arriving on campus and before they enroll in their first semester at Union County College.

Veterans Applicants

Union County College celebrates Veterans and encourages admissions and enrollment. Union County College participates with the VA provisions of the Federal Laws which entitle veterans to educational benefits. The requirements and services provided for the various programs can be reviewed through the VA website www.gibill.va.gov. To be certified for VA educational assistance, students must apply to the College, matriculate in an eligible degree or certificate program and apply for veteran benefits; proof of VA benefits and documents may be required. Veterans must check in with the Admissions office located on all campuses before registering for classes to ensure all requirements are met.

Union complies with the requirements of 38 USC 3679(e). For more information, see Title 38 US Code Section 3679(e) School Compliance in this catalog.

Bridge Program – Dual Enrollment

High school juniors and seniors may apply for the Bridge Program to earn college credits while still in high school. Permission of their high school advisor and parent/guardian is required. Bridge applicants must have a ‘B’ high school average.

If needed, students will take the Directed Self-Placement (DSP) questionnaire, take the Accuplacer College Assessment Exam, or have passing cutoff scores for the SAT or ACT (see Testing and Placement) to be exempt from taking the Math and or English portions of the DSP or Accuplacer College Assessment Exam. Bridge applicants must place out of all developmental courses to be eligible for registration. Bridge Program applications are available in the high school guidance offices or the Recruitment and Admissions, Records, and Registration Offices on any campus. Students will be required to submit a Union County College application for admission with the completed Bridge form. Acceptance will be based on the results from the DSP survey, Accuplacer, SAT, or ACT scores and submission of required documents.

Dual/Joint Admissions Agreements

Union County College students who complete their associate degrees in designated programs and who fulfill all the necessary criteria of the dual admission program will be guaranteed admission as juniors to their choice of several undergraduate colleges/universities with which Union County College has agreements. For more detailed information, see Dual Admissions Agreements, page 48.

Readmission with Good Standing

A student who has withdrawn from Union County College in good standing and has left for a period of at least two consecutive semesters and seeks reinstatement need only to complete an application form. Students who withdraw and intend to re-register for the following semester need only fill out a registration form. When a student returns to Union County College under the readmission category, the student must adhere to the program requirements in effect at the time of readmission.
Registration

Registration, the process by which an admitted student enrolls and completes payment for their tuition and fees, must be done each semester/session. The registered student receives or may acquire a class schedule and a paid receipt which will verify enrollment in the requested classes.

New freshmen and current students who enroll have access to a member of the advising staff to assist in the scheduling and completion of the registration form. The advisor will assist the student with identifying the approved requirements of their program/major and assist students in the choice of electives.

The process is followed each term thereafter, students submit their registrations for the next semester in accordance with Union County College registration instructions. Online registration is available to most students and we recommend students take advantage of Self Service. It is the student’s responsibility to be aware of the registration, withdrawal refund policy, etc. and have knowledge of graduation requirements of his or her program, to select the correct courses, to accumulate the required number of credits, and to avoid duplication of subjects. A full-time student may carry a minimum of 12 credit hours. Students requesting registration for over 18 credit hours must see an academic advisor for approval. Students registering for over 21 credits must obtain approval from the appropriate Division Dean.

Candidates may register at Union County College as full-time students (12 or more credit hours) or as half-time (6-11 credit hours) or as less than half-time or part-time students (1-5 credit hours) each semester/session. Classes are available days, evenings, and weekends.

A current student who wishes to change his/her curriculum must complete a program change form with an advisor and meet all requirements. New students wanting to matriculate (declare a major), and who have not done so at time of application submission must see an academic advisor.

Students who, after having registered, decide not to attend before the beginning of the ensuing semester may drop courses through Self Service, or meet with an advisor to complete a drop/add form. All forms must be submitted to the Student Services Center on any of the campuses to be officially processed. Students dropping all courses, with no intentions of returning the following semester, must return any items that belong to the College (such as a current Union County College identification card), to the Student Services Center. Tuition refunds will be processed through the Student Services Center, if applicable.

JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging students must consult with their school’s advisor for registration and schedule changes. Registration, drop/add, and withdrawals for all courses must take place through the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging registration office. Practical Nursing and Allied Health students will receive specific information on the policies and procedures for registration, class schedule changes, and withdrawals. Union County College/Rutgers SHRP students must meet with an admissions officer or advisor to discuss pre-requisite courses required for the program. Acceptance is based on approval by the Rutgers SHRP admission committee.

Students who have not settled financial obligations incurred at the College will be prohibited from registering or receiving transcripts or final grades until outstanding debts are paid. There may be a fee incurred for switching sections.

The College reserves the right to cancel any course where there is insufficient enrollment. Visit our website www.ucc.edu.

Classification of Students

Matriculated Students – Students who are accepted in a specific program of study for degree or certificate credit on a full-time or part-time basis are matriculated students. Official high school and college transcripts may be required. Full and part-time students who have selected their program of study as undecided will change their program to a college program after completing no more than twelve degree credits or have their program changed by the College to Liberal Studies.

Non-Matriculated Student – Students who are not accepted in a specific program or who do not wish to declare a program are nonmatriculated. Credits earned as a non-matriculated student may be applied toward a future degree or certificate if they apply.

To be eligible for financial aid, students must be matriculated.

Class Standing

Students with less than 30 credits are considered in freshman (FR) standing; students with 30 credits or more are considered to be in sophomore (SO) standing.

Program Change Requests

The Program Change Process is completed in a Student Services Center. Students in good academic standing may apply to change their program of study after they have completed at least one semester at Union County College. Students meet with and complete the Program Change form with an advisor. Students requesting a change in their major to an allied health program may be required to fulfill additional requirements.

Schedule Changes

Limitations on section size make it impossible for every student to arrange a schedule which will meet his/her personal convenience in every instance. The student’s academic obligations must take precedence over his/her personal commitments, including employment. Students may drop a scheduled class(es) within the published registration dates posted on Self Service.

Students who are in the American Honors Program, Educational Opportunity Fund Program (EOF), Health Programs, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, Trinitas School of Nursing, and Rutgers SHRP will meet with and do all registrations through the program advisor.
Financial Information

Welcome

Union County College is committed to providing a quality education at an affordable price. The Office of Student Accounts is here to help you understand the costs associated with your educational experience and to assist you in being successful. Through the College’s Self-Service Finance links, you can easily view your payment history, refunds and any related holds on your account, and pay your bill by credit card or by e-check. In addition to our online services, we are here, onsite, to answer any questions you may have about your tuition and fees, including managing payment plan options.

GUIDELINES FOR PAYING TUITION AND FEES

A current schedule of tuition costs and fees is available on the College’s website at: www.ucc.edu/admissions/paying-for-college/estimated-costs-to-attend/tuition-fees-and-books

Please visit the Student Services Center on the College’s Cranford, Elizabeth, or Plainfield campus, call (908) 709-7063 or e-mail StudentAccountsOffice@ucc.edu for more information. For privacy reasons, please use your student email account.

Payment Policies

When you register, you are agreeing to purchase a seat in each class you select and are responsible for payment of the tuition and fee charges. Should you choose not to begin the classes for which you have registered, you must officially drop those classes according to the published deadlines to avoid being charged. Failure to attend a class does not constitute an official drop, and you will be held responsible for the associated charges.

You can view your account balance online at any time by going to the Student Finance link in Self-Service at: https://webss.ucc.edu/Student/Account/Login

Payment/Drop Procedures:
- Students who do not make payment or do not have sufficient financial aid by the posted payment deadline for the semester could be de-registered from their courses.
- Students who register after the payment deadline must make payment or have sufficient financial aid by the following business day or they could be de-registered.

Outstanding Balances

- All accounts with outstanding balances are subject to a monthly late fee until the balance is paid in full. Students who fail to pay their outstanding balance may be turned over to a collection agency and will be responsible for the added cost of collection fees, court costs, and legal fees. The cost of collection can add as much as 40% to the amount already owed and will result in the disruption of your credit worthiness when the collection agency reports the delinquent account to national credit bureaus.
- A “Hold” will be placed on the student’s account and the student will not be allowed to receive grades, letters of recommendation, or transcripts and will not be permitted to register for subsequent semesters until the debt is settled.
- In the case of those academically eligible to graduate, issuance of the diploma will be withheld until the balance is paid in full.
- The student is liable for the full retail-price replacement of any materials, which cannot be returned because of loss or damage.

Payment Options:

The College accepts Visa, MasterCard, American Express, and Discover in addition to cash, checks, and money orders.

- Payment of a prior semester balance must be in cash, certified check, money order, or by credit card.
- To pay using someone else’s credit card, you must have the written permission of the cardholder.
- Students who have estimated financial aid awards on their account at the time of registration may be able to apply such aid towards their charges. If financial aid does not cover all charges, the remaining balance is due from the student. In addition, students will be responsible for making payment to the College in the event that any Financial Aid award is revised or cancelled.
- The College reserves the right to require payment in cash when circumstances so warrant.
- Credit card and personal check (E-check) payments should be made online through Self Service.

Tuition Payment Plan

To ease the financial burden of attending, the College offers a Tuition Payment Plan for Fall and Spring semesters.

- Students must be registered for three or more credits/hours.
- There is a non-refundable fee to participate. The fee will be waived for students who sign up by the semester payment deadline.
- Payments are due in monthly amounts. The initial payment plus the fee (if applicable) is required upon sign up.
- The number of available monthly payments (up to a maximum of five) and the required down payment percentage depends on when the plan is established.
- Students can sign up for payment plan and make the initial payment on-line through Self-Service https://webss.ucc.edu/Student/Account/Login or at a Student Services Center.
- Students who fail to make payment by the date(s) specified on the promissory note will be subject to late fees. Once a late fee has been added to an account, the student may not eligible to participate in the Plan in future semesters.

Outstanding Balances

- All accounts with outstanding balances are subject to a monthly late fee until the balance is paid in full. Students who fail to pay their outstanding balance may be turned over to a collection agency and will be responsible for the added cost of collection fees, court costs, and legal fees. The cost of collection can add as much as 40% to the amount already owed and will result in the disruption of your credit worthiness when the collection agency reports the delinquent account to national credit bureaus.
- A “Hold” will be placed on the student’s account and the student will not be allowed to receive grades, letters of recommendation, or transcripts and will not be permitted to register for subsequent semesters until the debt is settled.
- In the case of those academically eligible to graduate, issuance of the diploma will be withheld until the balance is paid in full.
- The student is liable for the full retail-price replacement of any materials, which cannot be returned because of loss or damage.

(908)709-7000  UNION COUNTY COLLEGE 2021-2022 catalog 17
**Penalty Fees**

- **Return Check Fee** – A Return Check Fee will be assessed if the bank does not honor a check. Students will be required to pay all current and future balances in cash, certified check, money order, or credit card once a Returned Check Fee has been charged to their account.
- **Late Payment Fee** – All accounts with outstanding balances are subject to a monthly late fee until the balance is paid in full. Additionally, students who are on a Tuition Payment Plan will not be eligible for future Plan participation.

**Refund Policy**

- Refunds can take up to four weeks to be processed and for checks to be drawn. Checks will be mailed to students at their address of record. Note that refunds for payments made by credit card will be credited to the card from which the payment was made.
- Refund amounts are determined by the official drop date recorded on the student’s account.
- Courses officially dropped prior to the first scheduled day of a semester will result in a 100% credit of tuition and course fees.
  - Fall and Spring Regular Semesters – Courses officially dropped from the first scheduled day of the semester through the fifth day of the semester will result in a 50% credit of tuition and course fees. After the fifth day of the semester, no reduction in charges will be made for dropped courses.
  - Later Start, Summer, Winter, and Seven-Week Semesters – Courses officially dropped on the first scheduled day of the semester will result in a 50% credit of tuition and course fees. After the first day of the semester, no reduction in charges will be made for dropping courses.

**Residency**

Tuition charges will be computed based on a student’s residency on record on the first day of a semester:

- **Union County Residents**: Students with an address in Union County for a period of 12 months prior to the first scheduled day of a semester.
- **Out-of-County**: Students who for a period of 12 months prior to the first scheduled day of a semester have an address outside of Union County, but within the United States.
- **International**: Students who for a period of 12 months prior to the first scheduled day of a semester have not resided in the United States.

**Book Allowances**

- Students who have Financial Aid awards (excluding college work study or federal work study) that are greater than their tuition and fee charges for the semester, may be eligible for a Book Allowance.
- Available for the first three weeks of Fall/Spring semesters, and for the first two weeks of Summer semesters.
- The Program is offered as an aid to assist students with the cost of textbooks and essential course related supplies.
- Book Allowance purchases are charged against the student’s anticipated financial aid. Purchases over the amount of the Book Allowance are the responsibility of the student.
- In the event Financial Aid is reduced or cancelled, all Book Allowance purchases are the responsibility of the student.
- Some students may not be eligible to participate in the Book Allowance program but may be covered under a Book Voucher program. Visit the Student Services Center for details.

**Digital Book Subscription**

Union County College partnered with Cengage to deliver course materials through a digital book subscription program. Students registered in at least one of over 200 identified courses are automatically enrolled in the program for an affordable price of $140. The digital book subscription program provides electronic access for a full calendar year to course materials and 22,000 additional learning resources from the Cengage Unlimited library. Cengage materials are available online in the course Canvas page at the start of the academic term. The course materials can be accessed on any mobile device or computer, including the nearly 2,000 computers on Union’s campuses available during college operating hours.

For a list of identified courses and additional information on the digital book subscription program, visit https://www.ucc.edu/unionbooksubscription

**County Chargebacks**

Students who reside in New Jersey but outside of Union County, may be eligible for the lower in-county tuition rate if they qualify for a chargeback. The Union County College Student Services Center must be provided with the following forms to qualify:

- Certification of Inability to Admit which must be completed by the Registrar or Admissions Officer of your home county college.
- Certification of Residency which must be completed by the county fiscal officer (treasurer) of your home county.
- You will be charged in-county tuition if you submit these forms with your registration. If you paid out-of-county tuition and subsequently submit the forms, your charges will be reduced to the in-county rate, and if applicable, a refund will be issued.

- Students have 30 days from the first day of the regular semester to submit the required chargeback certificates.
Financial Aid

Welcome

The Financial Aid Department administers a number of state and federal financial aid programs to help Union County College students meet their college expenses. Financial aid awards include grants, scholarships, loans, federal work study, or any combination of these. All communication to students concerning financial aid is sent to their Union County College email, and students are responsible for checking their email regularly. Although the financial aid staff makes every effort to inform students of financial aid guidelines, the ultimate responsibility for complying with federal aid regulations is that of the student. Students are encouraged to apply for financial aid before April 15 to be considered for the maximum eligibility.

Application Procedures

Applying for financial aid is simple. You will need to complete only two forms to apply for all federal and state scholarships and grants, federal loans, federal work study, and all institutional scholarships. Full and part-time students are eligible for financial aid although some forms of aid will be adjusted if you are less than full-time.

Step 1: Complete your FAFSA and State Application
Your first step is to complete the FAFSA (Free Application for Federal Student Aid) at www.fafsa.gov. Remember to enter the school code of 002643 for Union County College so we receive your FAFSA electronically. You will need to apply for a Personal Federal Student Aid ID (FSA-ID). If you are a dependent student both you and one parent will need to apply for separate FSA-IDS and you will use the FSA-IDS to electronically sign your FAFSA. You and/or your parents must complete their federal tax return. While completing the FAFSA online, you will import your and/or your parents’ federal tax information from the IRS using a secure data retrieval tool (DRT).

Once you reach the Web confirmation page, locate the link entitled “Optional Feature - Start your State Application.” Respond to the questions for you and/or your parents and submit the additional information to the State of New Jersey.

Step 2: Apply for Scholarships
Once you have submitted your FAFSA, you should also complete the Scholarship Application. This is the application for all scholarships. Last year, we awarded hundreds of institutional scholarships to our students. If you are interested in applying for the Scholarship, please visit Union’s website (www.ucc.edu) and select the Admissions & Aid menu.

Step 3: Review your Student Aid Report
Once you have submitted your FAFSA, the U.S. Department of Education will process your FAFSA and send a copy to you in the form of a Student Aid Report (SAR). Your SAR will be sent to you electronically if you listed an email address on your FAFSA. Please review your SAR and notify our office if you made any mistakes. We will walk you through how to correct them.

Verification: The U.S. Department of Education randomly selects FAFSA submissions (FAFSA) for further review. Students selected are notified by the U.S. Department of Education and by email from the Union County College Financial Aid Services account. If selected for verification, students must submit documentation (i.e., tax, return, transcript, verification worksheet, etc.), and a review is conducted by Financial Aid Services. If errors are found, the financial aid staff must submit corrections to the U.S. Department of Education. This may decrease the estimated award, and the student will be liable for the balance. Verification must be completed prior to receiving payment of any federal grant, loan, or state awards. Failure to submit the required documentation will result in the denial of all federal and state financial aid including student loans.

Step 4: Review your Student Eligibility Notice
The U. S. Department of Education will also send your information to all of the colleges listed on your FAFSA, as well as to the New Jersey Higher Education Student Assistance Authority (HESAA). You will receive a Student Eligibility Notice (SEN) once your eligibility for state grants is determined.

Step 5: Check your financial aid status on line
All communication from the Financial Aid Office is in an electronic format. This means, as a Union County College student, it is essential to check Self Service to view your financial aid status and/or any documents required to complete your financial aid application AND to check your student email account daily because all communication we send to a student is sent through your student email account.

Financial Aid Application Deadlines

A Free Application for Federal Student Aid (FAFSA) must be completed each year and it serves the entire academic year (Fall, Spring, and Summer terms). The FAFSA becomes available each October for the following fall semester and remains available through the following summer. We recommend that you complete your FAFSA as soon as possible.

To expedite the accessibility of federal student aid, which includes federal grants, loans, and work-study opportunities, new regulations require students and parents to use their 2019 tax returns for the 2021-2022 academic year. If you previously received a Tuition Aid Grant (TAG) you will need to complete your FAFSA by April 15, 2021 in order to be considered for the grant in the next academic year (2021-2022). For more information on state grants, please visit the website for the State of New Jersey Higher Education Student Assistance Authority (HESAA) at www.hesaa.org. Certain funds are available on a limited basis; therefore, it is in your best interest to apply as early as possible.

Eligibility

To be eligible for Federal and State financial aid programs, you must:

- Be accepted as a student in an eligible certificate or associate degree program.
- Be making satisfactory academic progress for financial aid purposes.
- Have a high school diploma, General Education Development (GED) certificate, or a secondary school completion credential for home school.
- Be a U.S. citizen or eligible non-citizen (this includes permanent resident status).
- Have a valid Social Security Number.
- Register with Selective Service if required.
- Not be in default on a previously awarded student loan or owe a refund on a previously awarded grant.

Different forms of financial aid may have additional eligibility criteria.
Cost of Attendance for the 2021-2022 Academic Year

“Tuition and fees are subject to change based upon the Board of Trustees’ discretion”

Below is the estimated cost of attending Union County College for an average full-time student (12 credits) for one year (2 semesters). The total amount is used to determine financial aid awards based on the student’s eligibility index. Amounts are subject to change.

<table>
<thead>
<tr>
<th></th>
<th>Independent Student</th>
<th>Dependent Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$5,281.00</td>
<td>$5,281.00</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>$1,440.00</td>
<td>$1,440.00</td>
</tr>
<tr>
<td>Room and Board</td>
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<td>$4,246.00</td>
</tr>
<tr>
<td>Transportation</td>
<td>$2,582.00</td>
<td>$2,582.00</td>
</tr>
<tr>
<td>Living Expense</td>
<td>$2,832.00</td>
<td>$2,832.00</td>
</tr>
<tr>
<td>Total Budget</td>
<td>$24,813.00</td>
<td>$16,381.00</td>
</tr>
</tbody>
</table>

Types of Aid Available

Union County College offers many types of financial aid from federal, state, and institutional sources to help you fund your education. Here are some of those types of financial aid. The information below includes grants, scholarships, loans, and work study. All aid is subject to available federal, state, and institutional appropriations.

Federal Aid Programs – Title IV

Federal Pell Grant – The Higher Education Act of 1972 established this grant program to provide aid to financially needy students attending college. Students must meet eligibility requirements and must be pursuing a degree program or eligible certificate program. Students attending more than one institution in an award year may only receive a Pell grant at one school. The maximum federal Pell grant for the 2021-2022 academic year is $6,495 depending on your financial need. This grant may be adjusted based on changes in the number of credits that you register for in a term.

Federal Supplemental Educational Opportunity Grant (SEOG) – This program awards funds to undergraduate students with the greatest need. If you are a Pell Grant recipient with the lowest expected family contribution (EFC), you will be considered first. Just like Pell grants, the FSEOG does not have to be repaid. Most awards range from $100-$300, on a first-come, first-served basis.

Federal Work Study – The Federal Work-Study Program provides employment opportunities for students who need additional funds to help meet their educational expenses. To be considered as a candidate for the work-study program, a student must (1) be a U.S. citizen or permanent resident, (2) be enrolled in an undergraduate academic program, (3) be registered for at least six (6) or more credits, (5) meet the financial aid standards of satisfactory academic progress, and (6) be in good academic standing.

Federal Direct Loans – Union County College participates in the William D. Ford Federal Direct Loan Program, commonly known as direct lending. The College’s participation in this program allows students to borrow directly from the U.S. Department of Education. The Direct Loan program enables eligible applicants and their parents to obtain a student loan (Subsidized or Unsubsidized) or parent loan (PLUS) to meet their educationally related expenses.

2020-2021 INTEREST RATES**

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidized Loan</td>
<td>2.75%</td>
</tr>
<tr>
<td>Unsubsidized Loan</td>
<td>2.75%</td>
</tr>
<tr>
<td>PLUS (Parent) Loan</td>
<td>5.30%</td>
</tr>
</tbody>
</table>

* With a first disbursement date after July 1, 2020.
** Interest rates subject to change after July 1, 2021

Please review the studentaid.gov website for up-to-date interest rates

For application instructions, please go to the Financial Aid page on the College’s website, www.ucc.edu.

State of New Jersey Financial Assistance Programs

To receive funds from the State of New Jersey, students must register for a minimum of six (6) credits each semester. Academic progress regulations are the same as the federal regulations. Progress is monitored at the end of each semester.

Tuition Aid Grant (TAG) – The Tuition Aid Grant provides financial assistance to full-time college students or part-time students (enrolled for at least 6 credits) who have been residents of New Jersey for twelve (12) consecutive months prior to enrollment. To be considered for an award, a student must complete a FAFSA and a Tuition Aid Grant Application. The TAG application can be accessed after the student has submitted his/her FAFSA or by going to the Higher Education Assistant Authority website, www.hesaa.org.

Governor’s Urban Scholarship Program – The Governor’s Urban Scholarship is a merit award available to students who rank in the top 5.0 percent of their high school graduating class and attain a grade point average of at least 3.0 at the end of the junior year in high school, file a FAFSA within established deadlines, and have a New Jersey Eligibility Index below 10500. To qualify, applicants also must graduate from a traditional public, public charter, county vo-tech, or nonpublic school, and reside in Asbury Park, City of Camden, East Orange, Irvington Township, Jersey City, Lakewood, Millville, Newark, New Brunswick, City of Trenton, Paterson, Plainfield, Roselle Borough, or Vineland.

NJ STARS – This merit-based program is offered to students who at the end of either their junior or senior year are within the top 15% of their New Jersey high school graduating class. The scholarship may cover all or a part of the student’s tuition and fees. For more information, go to www.njstars.net.

Educational Opportunity Fund (EOF) – Instituted and sponsored by the State of New Jersey, the Educational Opportunity Fund is an academic support program providing access to higher education for students who show potential but who need additional support services and financial aid to succeed academically. All students accepted into the EOF Program must be pursuing a degree, be residents of the State of New Jersey for at least one year, meet all program requirements, and be citizens or permanent residents of the United States.

Community College Opportunity Grant (CCOG) – The Community College Opportunity Grant (CCOG) provides financial assistance for New Jersey residents in a Degree granting program who are enrolled in at least 6 credits per semester in Fall and/or Spring and who have an adjusted gross income of $0 - $65,000 (as of the 2020-2021 AY) will be considered for this...
As a financial aid recipient, it is your responsibility to:

- Complete and submit application materials to the appropriate agencies within required or recommended time frames.
- Complete your FAFSA each year at least 4 months prior to the semester that you will be attending.
- New Jersey residents must meet all deadlines set by the New Jersey Higher Education Student Assistance Authority (HESAA). Deadlines can be found at www.hesaa.org.
- Read all materials sent to you from the Financial Aid Office and other agencies awarding you aid. Read, understand, and keep copies of all forms you sign.

As a financial aid recipient, you have the right to:

- Know how financial need is determined, what the criteria are for awarding aid, how academic progress is determined, and what you have to do to continue receiving aid.
- Know the implications that dropping a course or withdrawing from Union County College will have on your student financial aid.
- Use student financial aid proceeds solely for direct educational costs and related living expenses.
- Provide additional documentation, federal tax transcripts, W-2's, and any additional information requested by the Financial Aid Office or HESAA. Be sure to provide the information to the office that requested it.

Rights and Responsibilities

As a financial aid recipient, you have the right to:

1. Know the correct procedures for applying for student financial aid, your cost of attendance, and the types of aid available.
2. Know how financial need is determined, what the criteria are for awarding aid, how academic progress is determined, and what you have to do to continue receiving aid.
3. Know the type and amount of assistance you will receive, how much of your need has been met, and how and when you will receive your aid funds.
4. View the contents of your student financial aid file, in accordance with the Family Educational Rights and Privacy Act.
5. Know the conditions of any loan you accept.
6. Know the terms, conditions, and pay rate for any student job you accept under the Federal Work Study Program.
7. Appeal any decision with the Financial Aid Office in regard to your application. Appeals should be filed no later than 30 days after the original notification that you have been denied aid.

As a financial aid recipient, it is your responsibility to:

1. Complete and submit application materials to the appropriate agencies within required or recommended time frames.
2. Use student financial aid proceeds solely for direct educational costs and related living expenses.
3. Provide additional documentation, federal tax transcripts, W-2’s, and any additional information requested by the Financial Aid Office or HESAA. Be sure to provide the information to the office that requested it.
4. Comply with the provisions of any promissory note and all other agreements you sign.

FINANCIAL AID POLICIES

Attendance

All students receiving financial assistance must attend classes regularly.

Return of Title IV Funds Policy

The term “Title IV Funds” refers to the federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: Unsubsidized Direct Loans, Subsidized Direct Loans, Direct Plus Loans, Federal Pell Grants, and Federal SEOG grants.
The Return of Title IV Funds policy applies to financial side students who withdraw from all classes in a semester. A student’s withdrawal date and amount of Title IV funds earned are determined by:

- the date the student began the institution’s withdrawal process at the Student Services Centers located on each campus; and
- the student’s last date of attendance at a documented academically related activity; or
- the midpoint of the semester for a student who leaves without notifying the institution.

Title IV is prorated based on the number of days attended up to greater than the 60% point in the semester. Title IV aid is viewed as 100% earned after that point in time. Notices of possible refunds and adjusted bills will be sent to the student’s home address following withdrawal.

**Institutional Responsibilities in Regard to the Return of Title IV Funds include:**

- Providing each student with the information given in this policy.
- Identifying students who are affected by this policy and completing the Return of Title IV Funds calculation for those students.
- Returning any Title IV Funds that are due the U.S. Department of Education Title IV programs.

**Student’s Responsibilities in Regard to the Return of Title IV Funds include:**

- Students are responsible for the balance of unearned Title IV Aid that was disbursed directly to the student and in which the student was determined to be ineligible for via the Return of Title IV calculation.

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**Satisfactory Academic Progress and Progress**

Federal regulations require all financial aid recipients to maintain satisfactory academic progress in a course of study leading toward a degree or certificate. Failure to meet one or more of the established standards of Satisfactory Academic Progress (SAP) will make a student ineligible for financial aid. Financial aid SAP status includes all previous academic history, even if the student did not receive financial aid.

Statuses are updated at the end of each semester, including summer. It is the student’s responsibility to monitor academic progress. Although the Financial Aid Services notifies students of their status, students who do not meet the standards will be ineligible for financial aid even if they do not receive correspondence.

**Satisfactory Academic Progress Standards**

**Grade Point Average (GPA):** Students must maintain a 2.0 cumulative GPA on all hours attempted at Union County College.

**Completion Rate:** Students must complete 67% of all hours attempted at Union County College. See below for how the percentage completion is calculated.

<table>
<thead>
<tr>
<th>Credits Attempted/Earned</th>
<th>Percentage Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/12</td>
<td>50%</td>
</tr>
<tr>
<td>24/20</td>
<td>83%</td>
</tr>
<tr>
<td>60/40</td>
<td>66%</td>
</tr>
<tr>
<td>60/55</td>
<td>90%</td>
</tr>
<tr>
<td>97/60</td>
<td>61%</td>
</tr>
</tbody>
</table>

**Maximum Time Frame:** Students receiving financial aid must complete their program of study within a reasonable time frame. The maximum time frame to complete a program is 150% of the published length of the academic program or certificate (including all transfer credit hours).

<table>
<thead>
<tr>
<th>Program</th>
<th>Credits Required</th>
<th>Maximum Credits Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>75</td>
<td>112.50</td>
</tr>
</tbody>
</table>

**Consequences of not meeting Satisfactory Academic Progress (SAP)**

**Financial Aid Warning –** The first time that a student fails to meet the SAP standards of a cumulative 2.0 GPA, 67% completion rate, or maximum time frame, he or she will be placed on financial aid warning status and be notified of their status. The student will remain eligible for financial aid for one semester while on warning. If a student fails to meet the SAP standards of a cumulative 2.0 GPA and 67% completion rate after being placed on financial aid warning status, then he or she will no longer be eligible for financial aid.

**Exceeds Maximum Time Frame:** If a student fails to meet the Maximum Time Frame standard, then he or she will no longer be eligible for financial aid. Failure to meet one or more of the established financial aid standards of satisfactory academic progress will make a student ineligible for financial aid. Those students will be responsible for payment of their own tuition and fees.

**Satisfactory Academic Progress Appeal:** When a student loses financial aid eligibility because he or she failed to make satisfactory progress, the student may appeal that determination on the basis of: injury or illness, the death of a relative, or other extenuating circumstances. An appeal submitted by a student must explain why he/she failed to make satisfactory progress and what has changed that will allow the student to make satisfactory progress at the next evaluation. The appeal along with the Educational plan will be evaluated on an individual basis to determine if the student has demonstrated why they were unable to meet the standards.

**Financial Aid Probation:** When a student submits an appeal and their appeal is approved based on the described extenuating circumstances, then the student is placed on probation for one term and can receive financial aid for that term. It is possible that a student could be placed on probation more than once in his or her academic career, if there are successful appeals submitted and evaluated by the Financial Aid Services. At the end of the term on probation, the student must meet the Satisfactory Academic Progress requirements or must be meeting the requirements of the academic plan. Students who are placed on probation must:

- Achieve at least a 2.0 Grade Point Average for the term of probation; and
- Successfully complete ALL courses attempted.

A student who meets the above requirements of the Educational plan can have the probation status continued for another term. A student who does not meet these requirements would have to successfully appeal to be placed on probation. This appeal must explain why he or she failed to make satisfactory progress and what has changed in their situation that will allow them to make satisfactory progress at the next evaluation as well as detailed information about why the student failed to meet the requirements of the probation period, including what had changed and why the student will be able to meet the terms of the educational plan.

**Withdrawals –** All withdrawals are monitored by the Financial Aid Services. Students who withdraw from courses and reduce their course loads after registration will have their financial aid reduced accordingly. Charges and credits are adjusted according to the College Refund Policy. Federal aid is adjusted according to the Return of Title IV Funds Policy regulations.
Official or Unofficial Withdrawal From the College

If you receive federal aid and withdraw or stop attending any or all of your courses, Union County College is required to recalculate your eligibility for all of your financial aid awards. You may be required to return some or all of your federal financial aid if you have not completed at least 60% of the semester. In addition, you may be required to return some or all of your state and federal financial aid if you withdrew or stopped attending some or all of your courses.

You are not entitled to any federal or state financial aid for courses that you do not attend.

For more information on how withdrawing can affect your financial aid, please visit the Policies section of the Paying for College page of our website.

Leave of Absence Policy

Leave of Absence (LOA) is a federally mandated policy for all students who receive Title IV federal financial assistance (Federal Pell Grants, Federal Direct Subsidized or Unsubsidized Loans, Federal Parent Loans, and Student Educational Opportunity Grants). Under certain conditions (such as personal, military services, illness or health, employment, humanitarian or church service, family responsibilities, and financial obligations) students may request a LOA from the College.

A LOA will allow the student’s status to remain as “in school,” making the student eligible for a deferment on student loans during the approved time while not actively registered with the College. However, the specific requirements by which the student agreed to abide at the time any financial aid was accepted will remain in effect (approved students are advised to contact their loan servicer(s) for repayment obligations) students may request a LOA from the College.

For LOA – six months (180 days) or less:

- Students’ Federal loans will enter into grace. Federal Direct Student Loans have a six month grace period, and Federal Perkins Loans have a nine month grace period.
- During a grace period, students are not required to make payment on their federal student loans.
- If a student returns to school (at least half-time) within the grace period, their federal student loans re-enter into an “in school” status. Students are not required to make payments with this “in school” status.
- Students will want to contact the lender(s) of any private student loans they may have to determine whether they are required to make any payments when they are not enrolled in classes.

The student’s request for a LOA must be in writing, signed and dated, and submitted to the Director of Financial Aid. The student will submit a request prior to non-attendance unless unforeseen circumstances prevent the student from doing so. The student should drop all future registration, so as to not incur charges. The LOA must be completed and reason for requesting the LOA should be substantiated. The LOA request should give a reasonable expectation that the student will return from the LOA to complete classes. The student may submit additional supporting documentation as deemed appropriate. The following data must be provided on the LOA request:

- Complete name
- Student ID number
- Email address
- Degree program
- Semester the LOA is being submitted for
- State and end date for the LOA

The Director of Financial Aid will review the request and either approve, deny, or request additional information within seven (7) business days of receipt. The student will be notified of the decision by email. Once the LOA is approved the student must attend a LOA advisement session provided by one of the College’s Financial Aid Counselors. The student will need to schedule that appointment and attend to complete the LOA request process.

Retaking Coursework

You are eligible to receive federal financial aid for only one retake of a previously passed course.

Remedial Coursework

Remedial coursework prepares a student for study at the postsecondary level. Schools are permitted to count up to one academic year’s worth of remedial courses as eligible for federal financial aid.

For the purpose of this limit, that translates into 30 semester hours. Once a student has completed 30 TOTAL semester hours of remedial coursework, any additional hours of remedial courses cannot be included in financial aid eligibility.

At Union County College, any courses with a Developmental (DV) designation are considered to be remedial courses, for financial aid purposes. After a student has completed 30 credit hours of Developmental Coursework, any further hours are deducted from the student’s enrollment in a term.

Book Allowance

A book allowance is offered as an aid to assist students with the cost of textbooks and essential course related supplies and is available for the first three weeks of Fall/Spring semesters, and for the first two weeks of Summer/Mini semesters. If your financial aid award (excluding college work-study or federal work-study) is greater than the tuition and fees charged for the semester, you may be eligible for a book allowance.

Students should be financially prepared for out-of-pocket expenditures when their maximum book allowance has been reached.

Book allowance purchases are charged against the student’s financial aid. If the total amount of the book allowance is greater than the tuition and fees charged for the semester, the student may be eligible for a book allowance.

SCHOLARSHIPS

A scholarship is a sum of money awarded to a student to be used for educational expenses while attending Union County College. Scholarships are available from a variety of sources including:

State of New Jersey

New Jersey Student Tuition Assistance Reward Scholarship (NJ STARS)

High school graduates who finish within the top 15 percent of their class and meet all other criteria are eligible for this award within two
years of the year of graduation. Applicants must first apply for all need-based federal and merit-based state financial aid grants first, such as the Pell Grant, the Tuition Aid Grant (TAG), and Distinguished/Urban Scholars Award. After that, NJ STARS will cover the remaining balance of tuition. Those who qualify will have up to two years from the date of high school graduation to enroll and begin using the NJ STARS scholarship at Union County College.

**Governor’s Urban Scholarship**

The amount of these state awards is determined by the NJ Higher Education Student Assistance Authority and is indicated on the official Student Eligibility Notice (SEN) sent to students by that agency.

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**County of Union**

**Freeholder Scholars Program**

The Union County Board of Chosen Freeholders has established a “Freeholder Scholars Program” for Union County residents. The scholarship covers the cost of Union County College tuition and fees for entering or returning students who meet the following criteria:

- Fulltime enrollment status at Union County College (12 or more credits per semester)
- A minimum of 3.0 or B average achieved in high school
- Union County resident (per existing Union County College residency policy)
- Annual family income of $75,000 or less

Students applying for the Freeholder Scholars Program must file for federal and state financial aid; the Freeholder Scholars Program award will cover the difference between Union County College tuition and fees and financial aid received up to $1,500. Students are eligible to receive the scholarship for four consecutive fall/spring semesters providing they maintain a 3.0 grade point average at the College.

Freeholder scholarships are subject to appropriation of funds by the County of Union.

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**Union County College Scholarships**

To help defray the cost of tuition, fees, and other education-related expenses, you may be eligible to receive a Union County College scholarship. In support of Union County College’s mission to provide affordable, accessible and quality education, the Union County College Foundation invites students to apply for any of the hundreds of scholarships that the College offers annually.

There is a wide range of criteria for scholarship awards. To be eligible, students must be enrolled in a degree or certificate program for at least six credits per semester. Scholarships may be based on a number of considerations, including academic merit.

Information on how and when to apply for scholarships can be found by selecting the Admissions & Aid menu on Union’s website (www.ucc.edu). Students are urged to complete the applications as soon as possible, as scholarships are awarded on a first-come/first-served basis.

In order to be considered for the scholarships which specify financial need, scholarship applicants must also complete the Free Application for Federal Student Aid (FAFSA).

Scholarship recipients must comply with the following:

- attend the annual Scholarship Reception,
- submit a thank you letter to the donor via the Financial Aid Office,
- maintain a current mailing address and telephone number with the Union County College Admissions Office,
- declare a major

The Union County College Foundation is extremely grateful to those donors whose generosity has made these scholarships possible. A complete listing of the most current scholarships, along with the criteria, may be found on the Foundation’s website: www.uccfoundation.org.

Information on establishing an annual or endowed scholarship may be obtained by contacting the Union County College Foundation, 1033 Springfield Avenue, Cranford, New Jersey 07016, (908) 709-7505, foundation@ucc.edu.

**Current Union County College Scholarships as of April 1, 2021**

- AAI Members Memorial Scholarship (Amateur Astronomers, Inc.)
- Academic Learning Center Scholarship
- Achieving the Dream Scholarship
- Adjunct Faculty of Union County College Scholarship
- Dr. Mandana Ahsani Scholarship
- Alumni Association Part-Time Scholarship
- Alumni Scholarship for Degree Completion (In Memory of Winfred Weislogell)
- American Association of University Professors Scholarship (#1, #2, #3)
- American Way Scholarship
- Virginia and Henry Apelian Scholarship
- The Barnes-Taylor Family Memorial Scholarship
- Alan R. Barwolkek Memorial Scholarship
- James C. Bashe Memorial Scholarship
- Eugene H. Bauer Family Scholarship
- Ernest & Georgia Bell Scholarship
- Ceinwen Bergen Memorial Scholarship
- Elizabeth J. Bielefeld Memorial Scholarship
- Hermann J. Bielefeld Memorial Scholarship
- Donald E. Billiar Memorial Scholarship
- Samuel Blake Memorial Scholarship
- Elizabeth M. Blatz Scholarship
- Joan and Pete Blatz Scholarship
- Frank and Penny Borden Scholarship
- Cheyenne “Shay” Bond Memorial Scholarship
- Bracher Family and Hesseman Scholarship
- Bramnick Law Firm Scholarship
- The Nadine Brechner Scholarship
- Bristol Myers Squibb Scholarship
- The Brown Family Paramedic Scholarship
- Drs. Thomas and Tressa Brown Scholarship
- Dr. Tressa and Dr. Thomas Brown Scholarship
- Bruckner Family Scholarship
- James A. Burns Memorial Scholarship
- James & Sheila Campbell Scholarship
- Jim & Maggi Campbell Scholarship
- Rosemary and Eugene Carmody Scholarship (#1 and #2)
- Careers in Transportation Scholarship
- The Celgene Future Caregiver Award Scholarship
- Cenzo Amici Scholarship (in memory of John Neiswanger)
- Helen E. Chaney Scholarship
- Helen E. Chaney Completion Scholarship
- Helen E. Chaney Scholarship for Part-Time Students
- The Christ Fellowship Kingdom Advance Scholarship
- Coca-Cola Refreshments Scholarship
- Colonna/Cormier Scholarship
- ConnectOne Bank Scholarship
- ConnectOne Bank Completion-Scholarship
- Camille and Robert Cormier Scholarship
- Corporate Chairs Scholarship
- Professor Pedro X. Cosme Psych-Soc. Services Scholarship
- Joana Costa’s Scholarship for Dreamers in STEM
- County Commissioners Scholars Program
- Daniel G. Covine Memorial Scholarship
- Cranford Firefighters Mutual Benevolent Assoc., Local 37, Scholarship
- Cranford Jaycees Scholarship
- Marie Carmelle Crepin Memorial Scholarship
- Criminal Justice Through Diversity Scholarship
- Joan David-Chance Scholarship
- Judge Cuddie E. Davidson, Jr. Memorial Scholarship
- Charles T. Davis, Sr. Scholarship
- Maurice “Moe” DeGennaro Scholarship
- Del Cid Dreamer Scholarship
- Lillian Pierce Dievler Arts & Humanities Scholarship
- Rachel Ann Drinkwater Scholarship
- Dubitsky-Belmonte Scholarship
- The Joseph Dziuback Memorial Scholarship
- Elizabethtown Gas “Fueling the Future” Scholarship

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Dr. Edward Golda Scholarship
Glasser Foundation Completion Scholarship
The Arthur Geilfuss Memorial Scholarship
Frog Crossing Foundation First in the Family Scholarship
Harry B. Freeman Memorial Scholarship – He Gave
Freeholder Scholars Program
Follett New Student Scholarship
The Barbara H. Foley Scholarship (#1 and #2)
The Dr. Sondra Fishinger Honors Scholarship
Donald J. & Margaret V. Feaster Scholarship
The Farrell Family Scholarship
Frog Crossing Foundation First in the Family Scholarship
Thomas Gallagher Scholarship
Dorothy Gasorek Memorial Scholarship
The Emma Geilfuss Memorial Scholarship
General Endowment Scholarship
Glasser Family Foundation Scholarship
Glasser Foundation Completion Scholarship
Glasser Foundation First in the Family Scholarship
Dr. Edward Golda Scholarship
Joe & Rev. Dr. Jeanette Goodson Educational Scholarship
Goppelsroeder Scholarship Award
Robert M. & Gloria Goodman Memorial Scholarship
Dr. Andrea Green Memorial Scholarship
Judy Green Memorial Scholarship
John & Patricia Griffith Scholarship
Dr. Toby Grodner Scholarship
Professor Svetlana Grygotis Scholarship
Richard & LaVerne Haberski Scholarship
Charles J. Hanak Jr. and Mary Hanak Memorial Scholarship
Lavinia and Michael Hand Scholarship
Robert F. Hand Scholarship
Thomas H. Harkins, Sr. Scholarship
Margaret B. Hanson Memorial Scholarship
Dr. Elizabeth K. Hawthorne Women in Cybersecurity Scholarship
The Walter Hazzard Family Scholarship
William R. Hazlett Memorial American Honors Scholarship
Professor Donald Hedeen Scholarship
Sherry Heidary Scholarship
Heidary Education Scholarship
Ethel M. Hein – A Friend of the College Scholarship
Everett A. Hensley Scholarship
Hertling/Nickell Family Scholarship
Thelma Hines Scholarship
The Hispanic Law Enforcement Association of Union County, Inc.
Ed & Pat Hedden/Loretta Castaldo, RN, Nursing Scholarship
Phillip Robert Hudak Scholarship
Robert Hudak Memorial Scholarship
Infinium Science & Technology Scholarship
Institute for Intensive English Scholarship
Investors Foundation 1st in the Family Scholarship
Investors Foundation Scholarship for the Future
Sandra Irzoff Memorial Scholarship
Kenneth W. and Mildred F. Iverson Scholarship
Jacobson Family Scholarship
Jeantus: Lift & Climb Scholarship
Sharon Johnson Educational Excellence Scholarship
Alfred and Caryl Kaercher Scholarship
Kaercher “Bridge Builder” Scholarship
Bonnie Sue Kaplan Memorial Scholarship
The Karma Foundation Scholarship
Sharon Karmazin Scholarship
Leonard James Keating Memorial Scholarship
J.C. Kellogg Foundation Scholarship
Jean Killian Foundation Scholarship
Kiwanis Lutich Scholarship
The Barbara Ann Kloss Scholarship
Ferdinand Klump Scholarship
Fred & Betty Kopf Scholarship
Fred & Betty Kopf Scholarship for Part-Time Students
Fred & Betty Kopf Completion Scholarship
Harold Krewsky Memorial Scholarship
Raymond B. and Lilian B. Kravlov Scholarship
Esther and Jerome Krueger Scholarship
Catherine & Myron Kuskenko Memorial Scholarship
Lakeland Bank Scholarship
Harry Lampers Scholarship for Part-Time Students
Dolores M. Lanzner Memorial Scholarship
Mr. & Mrs. James Lappino Scholarship
Robert and Gloria Law Scholarship
Lawrence-Collins Scholarship
The Legacy Scholarship
The Legacy Completion Scholarship
Lessner Family Scholarship
Leigh and Julian Levitt Scholarship
Rep. John Lewis Memorial Scholarship
Linden Mayer’s Scholarship
L’OREAL Scholarship
Richard O. Luster Memorial Scholarship
Dorothy C. Luttgens Scholarship
Rebecca Lydon Memorial Scholarship
MacDonald/McMinn/Whitaker Scholarship
Dr. Kenneth C. MacKay Memorial Scholarship
Ian MacRitchie Memorial Scholarship
William & Helen MacRitchie Scholarship
Make A Difference Scholarship
The John A. & Ruth Davis Manger Scholarship
Manger/Brail Family Nursing Scholarship
Manley-Winser Foundation Scholarship
Joseph M. Margiotta Award for Excellence in History & the Social Sciences
Margareta Officer Scholarship for 1st Generation Students
Harry B. Martin Memorial Scholarship
Judy Danetz Mayer Scholarship
The Phyllis Mayer Memorial Scholarship
John H. and Serena M. McCoy Scholarship
James & Bernadine Memorial Scholarship
Peter J. McGuire Organized Labor Scholarship
Dr. William H. Mclean Memorial Scholarship
Elizabeth McMenamin Scholarship for Book Worms & Nerds
Stephanie McMenamin Scholarship for Women in Computer Science
Anna C. Moore Scholarship
Barbara Neblett Memorial Scholarship
Dr. Richard F. Neblett Memorial Engineering Scholarship
Robert Sydney Needham Memorial Scholarship
Christine S. Nelson Scholarship
The New Future Scholarship
New Horizons Endowed Scholarship
New Jersey Educational Assistance Reward Scholarship (NJ STARS)
Newark Beth Israel Hospital School of Nursing Alumnae Assoc. Scholarship
Duane & Joanne Norelli Memorial Scholarship
Michael A. Norelli Memorial Scholarship
Northfield Bank Foundation Scholarship
Sue Novak, RN, CRNP Nursing Scholarship
Paul J. O’Keefe Memorial Scholarship
Edward, Alice & Frances Olszewski Scholarship
Dr. Saul Olin and Maria Lydia Olin Memorial Scholarship
Susan Pencurak Memorial Scholarship
Elizabeth M. & Jesse B. Patberg Memorial Completion Scholarship
Pepsi Scholarship
Perry Family Scholarship
Frank J. Peterpaul Scholarship
J.G. Petrucci Company Veterans Scholarship
Vincent C. Piro Memorial Scholarship
Ann M. Paskoicz Scholarship
Power to Heal Scholarship
Emil Prazzak Memorial Scholarship
Project Achievement Student Scholarship
PSEG Foundation Scholarship
Public Safety Department Scholarship
Anne E. & Marilyn T. Quinn Memorial Scholarship
Gregoria Ramirez Achievement Award
Raudelunas Family Scholarship
Eleanor B. Reiner Foundation ASL/Deaf Studies Scholarship
The Ann Richards Memorial Scholarship
Andrea and V. Michel Rich Family Foundation Scholarship
Richard-Lepree Family Scholarship
Susan Bashe Robertson Memorial Scholarship
Arlene Rogoff Scholarship for Women in Mathematics
Roman Family Scholarship
Ronda Ross Memorial Scholarship
The Judy Rouse Memorial Scholarship
The Sabatino Family Scholarship
Santander First Generation Honors Scholarship
Carol Saunders-Corbin Memorial PN Scholarship
ScheeringFogh Foundation Allied Health Scholarship
Susan R. Schrepfer Memorial Scholarship
Ben A. Sciarillo Memorial Scholarship
Jacqueline Seeland Scholarship
William John Seeland Scholarship
September 11th Memorial Scholarship
SGA Ambassador Scholarship
C.W. Sharp and T.L. Murphy Scholarship
Dr. Murray Shereshevsky Memorial Scholarship
Taras Shevchenko Scholarship
Dr. Anthony Signorelli Memorial Scholarship
Arthur, Caroline & George Small Memorial Scholarship
Roy W. Smith Memorial Scholarship
Dr. Wallace Smith & Deborah E. Dobbins Scholarship
Southpole Foundation Scholarship
Rosa Bello Spina Memorial Scholarship
SSBH Scholarship
Sophie and Nicholas Steflik Scholarship
Stronger Together: Women Helping Women Scholarship
Student Government Association Scholarship
Student Government Association Academic Scholarship
Student Government Association Participation Scholarship
Student Government Association Partnership for the Future Scholarship
Student Government Association Part-Time Scholarship
Student Support Services Scholarship
Margaret Sweeney Memorial Scholarship
TDD Bank Scholarship
TLC Nursing Award
Vito Todaro & Joseph Bent Scholarship
Tomorrow’s Healthcare Hero (1)
Tomorrow’s Healthcare Hero (Level 2)
Mitch Turner Memorial Scholarship
UBS Westfield Scholarship
Union County College Foundation Partnership for the Future Scholarship
Union County College Foundation Scholarships – Initial
Union County College Foundation Scholars - Renewal
Union County College Foundation Fellowship Scholarship
Union County College Foundation Scholarship for Part-Time Students
Union County College Law Enforcement Scholarship
Union County College Physical Plant Association Scholarship
Dean S. Van der Clute Scholarship
Donald and Leean Van Gorden Nursing Scholarship
Madeline M. and Anthony A. Vertels Scholarship
Wakeman/ShopRite Scholarship
John Allison Ward Memorial Scholarship
Sherry Watan Scholarship
Weidenerbuhr Family Scholarship
Judge Chester and Emily Weidenerbuhr Scholarship
The Harry and Travis Weinberger Paramedic Scholarship
Wells Fargo Scholarship
William West Scholarship
Westfield Foundation Scholarship
Westfield Rescue Squad EMT Opportunity Scholarship
Westfield Rescue Squad Paramedic Scholarship
Frederick R. Wielch Memorial Scholarship
Lenny Andre Williams (LAW) Scholarship
Sturgis Wilson Memorial Scholarship
Doris Kiefer Wolf Memorial Scholarship
Professor Elmer Wolf Scholarship
Mary L. Wrice Scholarship for Computer Science
Lenny Andre Williams Scholarship
Louise Yoakum Memorial Scholarship
Yehoshua (Joe) Yosifon & George L. Patchell Scholarship
Zimmermann Family Scholarship
Cynthia Zieklowski-Augus Memorial Scholarship
Maria & Bruno Z. Ziolekowski Scholarship
George P. Zmirle Memorial Scholarship Award
Jack Zissel Memorial Scholarship

FINANCIAL AID

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Services for Students

Welcome
Upon your arrival at Union County College, you will discover a wide array of effective support services and programs that will help you achieve your educational goals. A caring community of staff has your success as its core, supported by other resources that include academic tutoring, honor societies, and career advising. We want to help each one of you successfully manage the transition into college and maximize your potential.

Advising, Career, and Transfer (ACT) Services

“Teaching to Foster Informed Decision Making”
We strive to foster student success by providing comprehensive quality resources to our students. Staff are available to assist you with academic advising, career assessment, transfer services, and crisis referral services. Whether you are pursuing an Associate in Arts or an Associate in Science degree on your path to a four year school or would like to obtain a Certificate or Associate in Applied Science degree in a career program, we will help you navigate the degree requirements of your program. Our purpose is to help you meet your educational goals and objectives through proactive advising guided by educational planning from your first semester through graduation.

Academic Advising
Academic Advising is a process in which you are assisted in making educated decisions to help you progress through your program and succeed academically. Specific services include:

- Educational Planning
- Review of Programs of Study and Selection of Academic Program
- Career Advisement
- Program Evaluation and Degree Audit
- Student Planning and Self-Service Registration Assistance
- Monitoring Academic Progress

Transfer Services
Students interested in obtaining an associate degree and transferring to another college for a bachelor’s degree may receive guidance on streamlining the process through the following services:

- NJ Transfer Workshops: Navigating njtransfer.org
- On-site Admission/Instant Decision Days
- Scholarship Information Available to Transfer Students
- Transfer Fairs
- Transfer Resources

To learn more about Advising, Career and Transfer services, contact us at advising@ucc.edu.

Crisis Referral Services
Students in crisis may consult with the College’s Student Services Specialist Social Worker, who can make referrals to community resources based on your needs. The Social Worker is available to meet with you to help with issues such as food stamps, housing/rental assistance/shelter, domestic violence, behavioral health, substance abuse, utility assistance, Medicaid, child support, support groups and medical insurance. Students may be seen on a walk-in basis or by making an appointment by emailing socialworkservices@ucc.edu. All meetings are confidential.

Career Services
The Career Services Center is a comprehensive center for Union County workforce and economic development providing career, internship, and employment services. The Center serves Union County College students, alumni and community residents. Our staff will gladly assist you in the following areas:

- Career Advisement and Coaching
- Career Interest Inventories
- Resume and Cover Letter Writing
- Interview Preparation
- Internships and Job Search
- Career Fairs
- Social Media and Networking Opportunities
- Career Closet

To learn more about Career Services, contact us at careerservices@ucc.edu.

Disability Support Services
Union County College is committed to providing a total educational experience for students with disabilities. Disability Support Services is designed to assist students with documented disabilities. The goal is to ensure that each Union County College student is provided equal access to the College’s academic programs, activities, and awards without discrimination on the basis of a disabling condition. Students who have documented disabilities may receive help with the following:

- Academic Accommodations
- Academic Advisement and Registration Assistance
- Testing Accommodations
- Interpreters
- Referral to Community Resources
- Assistive Technologies
- Linkage to Para Transit Services providing transportation to and from the College

Accommodations are provided to address the special needs of students with documented disabilities, in compliance with the New Jersey Law Against Discrimination (NJLAD), Section 503/504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990, including the recent Amendments.

To learn more about Disability Support Services, contact us at disabilitysvc@ucc.edu.
Libraries

The Union County College Libraries serve as the major learning resource of the College. Information Literacy is the major goal of the Library. All Library services are designed to help students develop the ability to locate, evaluate, and use information sources creating greater success in the classroom and empowering life-long learners. Library holdings total more than 85,000 volumes, over 110 periodical subscriptions, 300,000 ebooks, 3,000 video/DVD programs, and more than 30,000 streaming video programs. In addition, the Libraries’ more than 90 subscription databases provide access to nearly 75,000 full-text journals, newspapers and reference sources via the Library’s web site. Nearly every database can be accessed remotely. The Library’s web site also includes virtual tours, instruction modules, library hours and policies, research guides and selected subject resources. All these resources can be accessed on campus or remotely.

The Kenneth Campbell MacKay Library on the Cranford Campus contains the major reference and research collections of the College. The libraries on the Elizabeth and Plainfield Campuses serve as the learning resource centers on those campuses with collections and services targeted to the specific programs offered at those campuses. Professional librarians are available for research assistance and information literacy instruction at all three campus libraries.

The MacKay Library is a four-story 50,000 sq. ft. facility. In addition to the library the building also houses the Cranford campus Academic Learning Center, the Innovation Center, the Television Studio, Photography Laboratory and Studio, Graphic Arts Laboratory, Painting and Drawing Studios, classrooms, and the Purchasing department. The third floor has 13 classrooms, an architecture laboratory along with meeting rooms. The MacKay Library has a 107 computer Information Commons and a 28 computer hands-on library instruction lab for information literacy instruction. In addition, the Library provides eight group study rooms, a silent study room, an archive of faculty publications and the Ely Stock Memorial Children’s collection. The Library also has comfortable seating, individual carrels, and study tables for student use.

The Kellogg Library is located on the ground floor of the Kellogg building on the Elizabeth campus. The Kellogg Library has a 45 computer Information Commons, a 28 computer hands-on library instruction room, and quiet study rooms. The Kellogg collection is focused on the needs of ESL and Nursing students.

The Plainfield Campus Library is located on the main level of the newly renovated Annex building. The Information Commons has 50 computers. The Plainfield collection focuses on ASL and Deaf Studies, ASL–English Interpreting, EMT, Paramedic, Physical Therapist Assistant, and Practical Nursing.

The Libraries on all campuses are connected through an online catalog and circulation system that indicates location and availability of resources. Students have access to the total holdings of the College Libraries. Materials can be borrowed from or returned to any campus by intercampus delivery on one day’s notice. Interlibrary loan service is available for materials not owned by the Libraries. All libraries have complete wireless access. All campus librarians provide Information Literacy Instruction which is carefully geared to specific course assignments. Instruction is designed to provide an overview of information resources and allows students the opportunity to work with a librarian to develop their research skills to achieve maximum academic success.

For more information see the Union County College Library Website: https://www.ucc.edu/library/

Academic Learning Centers

The Academic Learning Centers (ALCs) provide free tutoring for all currently enrolled Union County College students and deliver learning opportunities and web-enhanced instruction which focuses sharply on student engagement. Students are encouraged to take advantage of the ALC’s services whenever they need assistance. There is an Academic Learning Center conveniently located on each campus: in Cranford, on the first floor of the MacKay Library; in Elizabeth, on the first floor of the Kellogg building; and in Plainfield, on the main level of the Annex building.

Tutoring is delivered primarily by peer tutors, students recommended by their instructors, who have performed well in their course work and have demonstrated that they can convey their knowledge effectively to fellow students. Tutoring support is provided on a walk-in basis for most subjects based on tutor availability; no appointments are required. Tutors assist not only with course content but also with study skills, including critical thinking. In addition, the ALCs offer online tutoring for selected courses through synchronous live chat and asynchronous environments via a web-based service. Appointments are required for online tutoring; more information can be found on our ALC Online Tutoring Shell on Canvas.

Another important component of the ALC’s offerings on the Cranford Campus is the Math Success Center (MSC). This is an area devoted to mathematics support where students can find tutoring for all levels of math and math related subjects. The ALCs also offer workshops throughout the year to help students enhance their skills. Workshop topics include: Canvas LMS training for students; and other areas essential to student success. In addition, the ALCs offer support to Biology and Chemistry students through the availability of dedicated science resources, such as anatomical models, microscopes, slides. Collaborative Learning Sessions (CLS) are offered to Biology, Chemistry and Mathematics students and are facilitated by an experienced tutor. During these sessions, students can ask questions, receive help with the concepts they are learning in class, and participate in exciting learning activities.

The ALCs offer students access to Windows computers and printers; tutors are available to assist students with networked and web-based software used in mathematics, English as a-Second Language, and engineering courses, among others. In addition, students can use Microsoft’s Office products, access Canvas, and receive help with navigating Cengage Unlimited and Self Service.

The ALCs provide employment opportunities for Union County College students. Peer tutors are hired from the student body if they meet the departmental requirements and have supporting faculty recommendations.

For further information or to check with any of the ALCs for hours of operations and tutoring schedules, please visit our ALC Online Tutoring Canvas shell.

Website: https://www.ucc.edu/library/

SERVICES FOR STUDENTS

Academic Support

Academic Learning Centers
Computing Resources

The Information Technology (IT) department provides technology services and support for both academic and administrative office applications. A high-speed internet connection. All networks and resources are redundant and secure, ensuring users have reliable access to the internet and all core services.

Students have access to computers in labs, libraries, and Academic Learning Centers throughout the college. These labs allow access to academic software to support course curriculum as well as the Microsoft Office Suite. Specially applications include multimedia and Web development, Computer Aided Drafting/Computer Aided Manufacturing (CAD/CAM), computer game design, and desktop publishing using industry standard tools. Library applications, such as web-based databases and the electronic catalog, are available from any computer with Internet access. Students are also provided with a college email account, which includes access to Microsoft Office 365 and personal cloud storage. Multi-factor authentication is also available to keep accounts and information secure. With access to course-related applications, as well as computers, printers and robust wireless throughout the College, technology is available to support all programs of study.

IT services also include a Virtual Desktop Infrastructure (VDI), which allows access to a college desktop and software from a virtually any device. This allows remote access to specialized software that would normally only be able to be accessed while on a computer on campus. Students can access a powerful VDI desktop from almost any device and have the same experience as if sitting at a computer in the college.

The IT Helpdesk is the main point of contact for all technology needs. With offices on each campus, as well as 24x7 call and email support, your technology issues can be addressed in an efficient manner and can be easily escalated when required. The Helpdesk provides support for a variety of issues, including account problems, password resets, network/wireless access, and hardware/software support. The Helpdesk can be reached by emailing techsupport@ucc.edu or by calling 908-709-7979 for the Cranford Campus, 908-412-3567 for the Plainfield campus, 908-965-2355 for the Elizabeth Kellogg building, and 908-965-2349 for the Elizabeth Lessner building.

We always strive to provide reliable and secure IT services for our students, faculty, and staff to support the mission of Union County College.

Bookstore

The College Bookstore offers services on all three campuses. New and used textbooks, rentals, e-books and other instructional materials are available in the stores and online. There is also an array of official Union County College clothing, gifts, technology and snacks. As payment, the Bookstores accept cash, credit, checks and financial aid.

Air Force/Army ROTC

Union County College, Rutgers – The State University of New Jersey, and Seton Hall University have an agreement permitting male and female students of Union County College to cross-enroll in the Air Force ROTC program. Qualified students may complete the first two years of the four-year program on a cross-enrollment basis and the final two years by attending an institution sponsoring Air Force ROTC. Students who successfully complete the four-year program earn commissions as second lieutenants. For further information, contact the Admissions Office of Rutgers – The State University of New Jersey or Seton Hall University.

Employer, Outside Agency, Organization or Scholarship Tuition Assistance Plans

- Prior to registration, students should have the specifics of their Employer, Outside Agency, Organization or Scholarship Tuition Assistance Plan reviewed in the Student Services Center to ensure that the plan meets College guidelines.
- Students are required to complete and sign a Statement of Responsibility for Financial Obligations at the Student Services Center.
- Should the employer or other outside agency, organization or scholarship fail to pay in a timely fashion, the student will be responsible for the cost of attending Union County College.
- If the student’s bill continues to go unpaid, a hold will be placed on the student’s account preventing registration as well as the issuance of transcripts, Letters of Recommendation, and grade reports.

New Jersey National Guard Waivers

- The National Guard Waiver covers the cost of tuition only up to a maximum of 16 credits/hours per semester. Students are responsible for the payment of all other charges.
- The program requires that the student provide a Commander’s Certificate of Eligibility from their unit’s authorized representative.
- Students desiring to utilize the National Guard Waiver are required to complete the application process for Financial Aid. (See the Financial Aid section for additional details.) Students who are eligible for aid must exhaust all such aid prior to utilizing a National Guard Waiver.
- Students must submit the appropriate forms at the time of registration including verification that they have completed the Financial Aid application process.

Registration Fee for International Students

A fee will be assessed to International students seeking to obtain an INS Form I-20 Certificate of Eligibility for Non-Immigrant (F1) Student Status from Union County College. This is a non-refundable registration fee but will be applied toward the first semester tuition upon successfully obtaining the INS Form I-20.
Senior Citizens Waiver
- New Jersey residents 65 years of age or older at the time of registration may enroll at Union County College without the payment of any tuition charges in regularly scheduled courses provided that classroom space is available.
- The Senior Citizens Waiver covers tuition only. Students are responsible for payment of all other charges at the time of registration.
- Students may register on the first day of the semester. Students who register prior to the designated date CANNOT apply the Senior Citizens Waiver towards the cost of such courses.

Trade Act Program
- Attendance at Union County College under the Trade Act Program requires that the student present at time of registration a Letter of Introduction and Enrollment Agreement from the State of New Jersey Department of Labor.
- In addition, a completed contract (NAFTA-7 (R-9-96)) must be on file in the Union County College Finance Department.
- Students participating in this program may register at any time.

Unemployment Waiver
- The Unemployment Waiver covers tuition only. Students are responsible for payment of all other charges at time of registration.
- Students desiring to utilize the Unemployment Waiver are required to complete the application process for Financial Aid. Students who are eligible for aid must exhaust all such aid prior to utilizing an Unemployment Waiver.
- All students must submit the appropriate forms at the time of registration including verification that they have completed the Financial Aid application process.
- Students will be allowed to register on a space available basis on the first day of the semester. Students who register prior to the designated date CANNOT apply the Unemployment Waiver towards the cost of such courses.
- The waiver program is available to Union County residents. NJ residents who live outside of Union County may use the waiver only if their home county community college does not offer the courses they are taking. Documentation from the home college must be provided at time of registration (i.e. Certificate of Inability to Admit).

Internal Revenue Service Form 1098-T
- For each calendar year, the College issues IRS Form 1098-T to qualified students. Forms are mailed to students by January 31 of the following year.
- The 1098-T contains information to assist students to determine if they qualify for educational tax credits or deductions. For details on these credits/deductions or how to use the amounts listed on your form, consult either a qualified tax preparer or the IRS website: www.irs.gov
- The information on the form complies with IRS regulations. Amounts are reported in the calendar year in which the transactions occurred, which is not necessarily the same as the year in which the courses were taken.

Volunteer Tuition Waiver Program (Chapter 145)
- This program covers the cost of tuition only and is available for active members of a volunteer Fire Company or Rescue Squad and their dependent children and spouse. Individuals will receive a tuition credit, not to exceed a maximum amount over a four-year period per family.
- The student is responsible for the payment of all other costs at time of registration.
- The Volunteer Tuition Waiver Program requires that the student provide verification of service performed such as a completed Municipal Certification for Active Members of volunteer Fire Company, First Aid or Rescue Squad.
- Students desiring to utilize the Chapter 145 Waiver shall complete the appropriate Financial Aid application process (see the Financial Aid section for additional details) and, if eligible, such aid must be exhausted before applying the Chapter 145 waiver.
- Students will be allowed to register for classes on a space available basis on the first day of class for the semester.
- Students who register for courses prior to the designated date CANNOT apply the Chapter 145 waiver towards the cost of such courses.

Workforce NJ Development Program
- Students utilizing this program for credit classes should plan on registering well in advance of the start of the semester to insure that their contract is in place.
- Students must have the appropriate forms and a fully executed contract at time of registration.
- Students should be aware of program limitations as some costs might not be covered.
The Public Safety Department has the following responsibilities:

1. Protect the lives and safety of all individuals within the College property.
2. Safeguard College and personal property from theft, damage, vandalism, or misuse.
3. Prevent and control crime on campus.
4. Investigate crime on campus and recover stolen property when possible.
5. Preserve peace and resolve conflicts on campus.
6. Provide an immediate response to emergencies and to all persons requiring aid on campus.
7. Enforce College policies, rules, and procedures.
8. Advance cooperative relationships within the College community and contribute to its public relations program.

Illness or injuries due to accidents, which are incurred on-campus, or during a College-connected activity are to be reported immediately to the Public Safety Office on the campus where they occur. If it is not possible to make an immediate report, one should be made before 48 hours have elapsed.

Safety on Campus

All students are urged not to linger in lightly-traveled areas of the buildings or campus grounds after regular closing hours. If you must complete assignments in remote areas where the campus is in minimum use, you should exercise the following safety precautions: (1) find at least one other person whom you know well to work with – group work would be even wiser; (2) leave the area in pairs or as a group; (3) alert Public Safety in advance that you will be using the area and ask Public Safety to spot-check during your work period and escort you to your car if necessary; (4) leave the building by a common exit that may be closest to the area where you parked your car; (5) if you are waiting for a ride after dark, agree upon a well-lighted pick-up spot; and (6) if you are subjected to harassment or observe someone behaving in a suspicious manner that may jeopardize your safety, report the situation immediately to a Public Safety Officer or your instructor.

These are a few simple rules that may prevent the occurrence of an unfortunate situation. Most importantly, you should make yourself familiar with the campus buildings, exits, and general location of the Public Safety force. Please be reminded that you should carry your identification card with you at all times. Union County College is an “open” campus. Stay alert and exercise prudence to insure your personal safety at all times. Should any student, faculty/staff member, or any visitor on the campus become the victim of any crime, report the incident to the Public Safety Department immediately.

The following crimes which are reported to the Public Safety Department will immediately be reported to the local police so that they can conduct the criminal investigation: Murder, Rape, Robbery, Aggravated Assault, Burglary, Motor Vehicle Theft, Liquor Law Violations, Drug Abuse Violations, Weapons Possession. CAMPUS CRIME STATISTICS ARE PUBLISHED IN THE ANNUAL SECURITY REPORT AND DISTRIBUTED TO ALL APPLICANTS UPON REQUEST. In compliance with the Student Right to Know and Campus Security Act, crime statistics are reported to the U.S. Department of Education. Tools are available online to analyze campus safety and security at http://ope.ed.gov/campussafety/#/. In compliance with the Federal Campus Sex Crimes Prevention Act and relevant New Jersey Law, information regarding the enrollment of convicted sex offenders is available online at http://www.njsp.org/sex-offender-registry/index.shtml.

Emergency notification system sign-up

At the start of each semester all currently enrolled students as well as staff and faculty are automatically enrolled in the emergency notification system. If you wish to sign up manually, be advised opt-in list are purged at the end of every semester. To receive (REGROUP) alert messages, you must sign up at the following hyperlink: https://ucc.regroup.com/signup.

Parking & Automobile Registration

Students currently enrolled who intend to use designated parking facilities at Union County College campuses must have their automobiles registered through the Public Safety Office. There is a charge for a parking permit to be displayed by the registered vehicles. Automobiles parked on campus illegally or without proper, valid, parking permits will be ticketed and/or towed at the owner’s expense. Parking fines are assessed for parking and traffic violations. Speed zones on Campus are generally set at a maximum of 10 miles per hour. However, students are expected to exercise prudence at all times and heed all posted traffic signs. A complete listing of parking regulations and map of student parking areas can be found in the Public Safety Guide.
Academic Policies

Welcome
The faculty and staff at Union County College are committed to providing you with a coherent and relevant curriculum as well as learning opportunities that will engage and challenge you. We place you, the student, at the center of what we do and will help you to grow intellectually within a culture of respect and discovery.

Academic Dismissal/Probation
All students must earn a minimum Cumulative Grade Point Average of 2.0 or better in order to obtain a degree or certificate. Any Union County College student maintaining less than a 2.0 cumulative grade point average is considered not in good academic standing as defined by the College, and therefore, may be assessed for probation and dismissal recommendations. Recommendations regarding probation, dismissal, and conditions of re-entrance are made to the Vice President for Academic Affairs. A written notice is sent to students notifying them of their probation or dismissal status.

Academic Probation – The College recognizes that transitions are oftentimes difficult for students; and therefore, administers a probationary period. Students who fail to maintain a 2.0 cumulative GPA or better will be placed on probation for one semester. Students are expected to achieve a 2.0 cumulative GPA in their subsequent semester in order to retain their enrollment in the college.

Academic Dismissal – All students failing to reach their minimum cumulative GPA, as defined by the College, are placed on probation. After their probation period, students on probation will be assessed for dismissal from the college. All dismissed students must wait at least one full semester (excluding Summer Sessions) before they can seek readmission into the College. Students may be readmitted to the college only twice after sitting out in accordance with the dismissal action.

Appeals – In special circumstances, dismissed students may seek a waiver of their dismissal by submitting a written appeal to the Academic Progress Committee for consideration. The Vice President for Academic Affairs has the authority to make all final admission decisions.

Credit Loads – Any student placed on probation may not carry more than 13 credits per semester without approval of the Vice President for Academic Affairs or her/his designee.

Extracurricular Activities – While on probation, students are restricted from holding any office in any organization or participate in an extracurricular activity of the College.

Academic Forgiveness
Students who have been absent from the College for two (2) full years, have been readmitted and earned at least twelve (12) credit hours with a 2.0 average or higher on the hours earned after readmission, and who wish to have former grades and credits omitted from the calculation of the grade point average may apply for academic forgiveness to the Vice President for Academic Affairs. The granting of academic forgiveness is not automatic. Each case is judged on its individual merits. Academic forgiveness may be granted only once and is irrevocable. Students interested in academic forgiveness must see an advisor about the ramifications of making such a request. Courses may not be excluded if required for current major.

Academic Freedom
A faculty member is entitled to freedom in the classroom in discussing his or her subject, but should be careful not to introduce into his or her teaching controversial matter which has no relation to his or her subject.

Academic Integrity
Academic dishonesty is defined as, but not limited to plagiarizing or cheating by any means during a test or examination, or in any work intended to be done independently (such as term papers, reports, essays, take-home examinations or online assignments, pictures, photography, plastic sculpture, etc.) and submitted as work to be graded or otherwise evaluated by a faculty member. Permitting another to copy for a test or paper also constitutes academic dishonesty.

An in-depth explanation of proper citation can be found in the MLA Style Manual, the Chicago Manual of Style, and Kate Turabian’s A Manual for Writers of Term Papers, Theses, and Dissertations. Additional citation guides can be found at each of the Union County College libraries. Librarians will assist students in locating appropriate citation resources, enabling students to refer to information in an ethical manner as outlined in the Information Literacy Competency Standards for Higher Education from the Association of College & Research Libraries (ACRL).

Cheating/Plagiarism
There is an expectation that students will present as their own work only that which they have done themselves. The College will not tolerate dishonesty at any time, whether it be plagiarizing (the act of representing someone else’s ideas as your own) or cheating by any means during a test, an examination, or in any work intended to be done independently.

The term “cheating” includes, but is not limited to the following:

- a. Copying from another person’s test, electronic device, or paper.
- b. Permitting another to copy from a test or paper.
- c. Using crib notes or any instrument not authorized by the instructor.
- d. Concealing notes on parts of the body, desk, or other object.
- e. Using cell phones or texting during examinations.
- f. Claiming authorship of work that is not your own.
- g. Buying or selling quizzes, exams or term papers for the purpose of academic evaluation.
- h. Theft of examinations.
- i. Permitting another to:
  - a. Take an examination in your place.
  - b. Complete take-home examinations or other assignments.
  - c. Complete work for the purpose of academic evaluation in online courses.

The term “plagiarism” includes, but is not limited to the following:

- a. Representing someone else’s ideas as your own without crediting your source.
- b. Submitting assignments that do not include proper acknowledgment of the original source. Quoted material must be put in quotation marks and credited to the original source.
- c. Paraphrasing another’s work without proper attribution.
- d. Submitting deliberately misleading attributions or acknowledgments.
- e. Submitting a purchased term paper, or another person’s work as one’s own.
- f. Failing to properly document information obtained on the World Wide Web or other Internet sources.
Access to Student Records

The academic records of students are kept in the Registrar’s Office under the jurisdiction of the Registrar and apart from any disciplinary records, the latter being retained in the office of the Student Conduct Officer. Transcripts of academic records contain only information about the student’s academic status. The Family Educational Rights and Privacy Act of 1974 (FERPA) sets forth requirements designed to protect the privacy of students. The act speaks directly to statutes governing (1) access to student records and (2) the release of such records. Union County College complies with the intent of this legislation. Students are therefore assured of access to those educational records described under the law and their individual rights of privacy are equally protected by limitation of transferability of such records without their consent.

Advanced Placement/International Baccalaureate (IB) Credit

Advanced Placement (AP) Credit

Union County College awards transfer credit to students who have taken Advanced Placement courses and have achieved a score of 4 or higher on the Advanced Placement Examination for a particular subject. Transfer credits earned by way of Advanced Placement count toward the maximum number allowed toward a certificate or degree program.

International Baccalaureate (IB) Credit

Union County College awards transfer credit to students who have taken International Baccalaureate courses and earned a score of 4 or higher on specified IB Exams. Most subjects may be taken at either standard level (SL) or higher level (HL).

Students are responsible for having their official AP and/or IB scores sent to Union for evaluation.

For additional information on AP/IB transfer credit, visit www.ucc.edu/admissions/admissions-process/high-school-graduates/

Challenge Examinations

In some courses, challenge examinations may serve as the basis for students to earn credits. Students who pass the examination with the minimum required grade will be awarded credit for the course challenged. The course credit will be recorded on the student’s Union County College transcript. Should the student fail the examination, a copy of the challenge exam indicating failure will be filed; no credit will be granted on the Union County College transcript. No student who has taken and failed a course shall be permitted to retake the course via the challenge examination.

A student who wishes to obtain advanced standing through a challenge examination must obtain a challenge exam from the appropriate Division. If the student is deemed eligible, he/she completes the Request for Challenge Examination form and makes payment for the exam. The completed form and payment receipt are then brought to the Division Dean so that the time and date of the examination can be determined. The required fees for challenge examinations will be based upon 50 percent of the current course tuition. Students will be furnished general exam requirements. Challenge exams are not offered for all courses.

College Level Examinations (CLEP)

CLEP (College Level Examination Program) provides a method of earning college credits by passing a CLEP examination in various subject areas. Students may apply for CLEP through www.collegeboard.com.

Union County College awards a maximum of 12 credits for the Language CLEP exam, and up to 9 credits in other subject areas. The list of approved subject examinations for CLEP may be viewed at www.ucc.edu/testing. Transfer credits earned by way of successfully passing CLEP examinations count toward the maximum number of transfer credits allowed toward a certificate or degree program.

Union County College does not grant credit for a CLEP exam if a student has attempted a college-level course aligned with that exam. For example, if you successfully completed English 101 or a comparable course, you may not receive CLEP credit in that same subject. Also, the College does not permit students to earn CLEP credit for a course that he/she failed.

Union County College administers CLEP tests to its students, in the Testing Center on the Cranford campus. If you are a Union County College student, please go to www.CLEP.com to select and pay for the test of your choice. Do not select a test site. After you pay College Board for the CLEP test, print out your ticket. You will need to bring this ticket and a government issued ID with you when you take the test. Call the Testing Center at 908-709-7486 to schedule the date and time of your CLEP test or email testingcenter@ucc.edu for a current schedule.
College Credits Assigned by Instructional Mode

In awarding credit hours, Union County College conforms to state and federal definitions, as well as any policies set forth by the Middle States Commission on Higher Education. Union County College has fall and spring semesters that consist of 15 weeks of instruction that include a final exam week. The College also offers 6- and 10-week summer terms, an 11-class winter session, 13-week Saturday or Sunday sessions, and 11- or 12-week Later Start classes, which begin in the third week of each fall and spring semester. All scheduling options include an additional final exam week and comply with all policies regarding meeting times and amount of work required.

LECTURE
Courses with multiple students that meet and participate in various forms of group instruction under the direct supervision of and instruction by a faculty member, wherein the student performs substantive work in a classroom setting.

<table>
<thead>
<tr>
<th>Credits Awarded</th>
<th>Minimum Contact Time</th>
<th>Per 14-Week Session (plus final exam)</th>
<th>Minimum Out-of-Class Student Work Total for 14 Weeks (Outside Work x Number of Weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 credit</td>
<td>55 minutes per week</td>
<td>750 minutes per semester</td>
<td>1500 minutes</td>
</tr>
<tr>
<td>3 credits</td>
<td>160 minutes per week</td>
<td>2250 minutes per semester</td>
<td>4500 minutes</td>
</tr>
</tbody>
</table>

LABORATORY
Courses with a focus on experiential learning under the direct supervision of and instruction by a faculty member, wherein the student performs substantive work in a laboratory setting. The credit to contact hour ratio is 1:2 or 1:3 as stipulated by the New Jersey President’s Council.

<table>
<thead>
<tr>
<th>Credits Awarded</th>
<th>Minimum Contact Time</th>
<th>Per 14-Week Session (plus final exam)</th>
<th>Minimum Out-of-Class Student Work Total for 14 Weeks (Outside Work x Number of Weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory 1:2</td>
<td>107 minutes per week</td>
<td>1500 minutes per semester</td>
<td>750 minutes</td>
</tr>
<tr>
<td>Laboratory 1:2</td>
<td>321 minutes per week</td>
<td>4500 minutes per semester</td>
<td>2250 minutes</td>
</tr>
<tr>
<td>Laboratory 1:3</td>
<td>160 minutes per week</td>
<td>2250 minutes per semester</td>
<td>0 minutes</td>
</tr>
<tr>
<td>Laboratory 1:3</td>
<td>482 minutes per week</td>
<td>6750 minutes per semester</td>
<td>0 minutes</td>
</tr>
</tbody>
</table>

Course Repeats
When a student repeats a course, only the higher grade will be averaged in the cumulative average. A student may not repeat a course more than once, including a “W” grade, to improve the grade received initially without written approval from the Division Dean.

Repeating a course when a “D” or better grade was previously recorded will not earn additional credits for the course. Only the grade-point average may be improved. Both courses will remain on the transcript.

Course Substitutions
Students may request a course substitution if the required course needed for graduation is not available. Course substitutions are given at the discretion of the Division Dean. It is strongly recommended that students obtain course substitutions before registering for the substitute course. The substituted course will appear on the student’s transcript. If the substitution requires approval from more than one Academic Division, the substitution form must be signed by both Academic Deans. The Vice President for Academic Affairs reviews all requests for final approval. All substitutions are kept on file in the Registrar’s Office until the student graduates.

Examinations, Tests & Quizzes
- A two-and-one-half-hour final examination is given at the conclusion of all courses.
- Students are required to take all tests or examinations on the days scheduled when such tests or examinations are announced in advance by the instructor.
- Make-up tests or examinations shall be given at the discretion of the instructor.
- Unannounced quizzes may be given at the instructor’s discretion.

Grade Changes
Students requesting grade changes must present their appeal to the classroom instructor who awarded the grade. It is the instructor’s prerogative to determine whether there is justification for a grade change. If a change is approved, the instructor must secure the required grade change form from the division secretary or Registrar’s Office. The grade change form must be forwarded to the Vice President for Academic Affairs for approval in order for the grade change to be officially recorded on the student’s record.
Grades

The College uses the following system of grading to indicate on its records the quality of a student’s work:

- **A** . . . . . . . Excellent
- **B+** . . . . . . Very Good
- **B** . . . . . . . Good
- **C+** . . . . . . Above Average
- **C** . . . . . . . Satisfactory
- **D+** . . . . Below Average (not recognized for transfer)
- **D** . . . . . . . Below average – lowest passing grade (not recognized for transfer)
- **F** . . . . . . . Failing
- **I** . . . . . . . Incomplete*
- **XF** . . . . Incomplete changed to failing*
- **UF** . . . . Unofficial withdrawal (student stopped attending; or did not officially withdraw; calculated as a failing grade)
- **W** . . . . . . . Official withdrawal
- **AU** . . . . . . Audit (no credit)

* An “Incomplete” grade may be given in cases of extenuating circumstances approved by the Instructor. A grade reported as “Incomplete” at the end of a semester will be permanently recorded as “XF” [=F] if the Incomplete is not removed within the first six weeks of the next regular semester. It is the student’s responsibility to make acceptable arrangements with the instructor to complete the course requirements within this period. If the student is unable to contact the instructor, timely notice should then be given to the Division Dean.

It is the student’s responsibility to report an error on his/her recorded grade to the Instructor within two weeks of posting of the grade. Otherwise, it is assumed that the grade recorded is accurate and will be recorded permanently on the student’s record. A student’s academic standing is based upon his/her performance in all courses expressed in terms of the “academic average” he/she achieves. In computing this average, the following numerical values are assigned to each letter grade.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B+</td>
<td>3.5</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C+</td>
<td>2.5</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D+</td>
<td>1.5</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
<tr>
<td>XF</td>
<td>0</td>
</tr>
<tr>
<td>UF</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
</tr>
</tbody>
</table>

Numerical quality points are then determined by multiplying the above values by the number of credit hours which the course carries. For example, a three-credit hour course in which the student receives a B represents 9 quality points earned.

Academic average is determined by dividing the total number of quality points earned by the total number of credits taken, whether passed or failed. The following table is an illustration of this computation:

**GRADE & QUALITY NUMERICAL POINTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits Value Per Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 101</td>
<td>C (2) 6</td>
</tr>
<tr>
<td>PSY 101</td>
<td>B (3) 9</td>
</tr>
<tr>
<td>BIO 111</td>
<td>D (1) 4</td>
</tr>
<tr>
<td>FRE 101</td>
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<tr>
<td>ENG 101</td>
<td>B+ (3.5) 10.5</td>
</tr>
<tr>
<td>CST 101</td>
<td>F (0) 0</td>
</tr>
<tr>
<td></td>
<td>19 41.5</td>
</tr>
</tbody>
</table>

Total credits taken: 19
Total quality points earned 41.5
41.5 divided by 19 results in a 2.18 grade point average.

Grades received in the preparatory or developmental courses are not included in the computation of averages, but are considered in the calculation for assigning probation or dismissal by the Academic Progress Committee. Instructors enter final grades online. Students must go to Self-Service to view or print their final course grades. Instructors are not permitted to post grades by social security numbers. No information regarding grades will be offered over the phone.

**Grading**

It is College policy that every instructor must provide students with a written statement regarding his/her grading policy at the beginning of each academic term. Students who have not received such information prior to the end of the second week of classes should ask the instructor for a statement outlining the grading policy to be followed.

**Graduation**

It is the responsibility of students to meet with an advisor to make sure they have taken all courses required in their program, and that they have sufficient credits each semester to meet the requirements for graduation. Students are strongly encouraged to meet with an advisor to review their program requirements prior to completing a graduation application. The student must submit the application for graduation.

Students enrolled in Cooperative Programs with JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, Trinitas School of Nursing, or Rutgers SHP must consult with the program advisor.

Degrees and certificates will be officially issued following the conclusion of the Summer Sessions (August), the Fall Semester (January) and the Spring Semester (May). Deadlines for submission are:

- **February 1** May graduate
- **June 1** August 31 graduate
- **October 1** January graduate

All degree or certificate recipients are eligible to participate in commencement exercises for the academic year. There are two commencement ceremonies each year; one is held in January, and one is held in May.

Students leaving the College before they complete their program who intend to transfer back credits from another institution must ensure that they have secured written approval from Admissions to transfer courses back to Union County College. The transfer credits must be approved by the Dean.

Until the Registrar’s Office has cleared the student for graduation, no
degree or certificate information will be entered on the student’s transcript or issued. Degrees or certificates issued will carry the graduation date closest to the date of final clearance.

**Automatic Degree Awarding** – Union County College has instituted a process which makes it easier for students to gain the certificates or degrees they have earned. Students are automatically awarded the degree or certificate for their declared program of study as it is completed, no application is necessary and there is no fee for graduation. Students will be notified of their candidacy for graduation at the beginning of the semester via their Union County College student email. Degrees and certificates are officially issued following the conclusion of the spring (May), summer (August), and fall (January) terms.

After grades are due for the term, a final review will be conducted to determine if a student has successfully met all graduation requirements. At that time, the degree or certificate will automatically be posted on the student’s transcript, and students will be notified via their Union County College student email. Prior to conferral of their degree, students will have an opportunity to defer their graduation.

**Commencement** – Commencement is the ceremony for students, family, friends, and the College community to celebrate the student’s academic accomplishments. Participation in the ceremony means that students are eligible to graduate in that term; however, it does not mean that the student has earned a certificate or degree.

There are four commencement ceremonies each year, two in January and two in May. Students that are eligible to graduate in summer (August) or fall (January) terms may participate in the January ceremony. Students eligible to graduate at the conclusion of the spring (May) term may participate in the May ceremony.

Participation in a ceremony outside of a student’s eligible term may be granted provided that the student has less than 8 credits remaining to be completed and is registered for the course(s) in the following term. The commencement program will include the names of students eligible to graduate by term. Students are required to confirm attendance at the ceremony by responding to an email from the Registrar informing them of their candidacy to graduate.

There is no fee to participate in graduation and cap and gown are provided to graduating students free of charge.

**Second Degrees**

Students seeking second degrees at Union County College must meet with an advisor to review program requirements prior to pursuing a second degree. Students who have earned a certificate credential at Union County College can use half of the certificate program credits that are applicable toward a second certificate program. Students who have earned a certificate credential at Union County College can use all of the certificate program credits that are applicable toward a degree. Student seeking a second degree at Union County College can use half of their degree program credits toward a second degree program at Union County College. Students can transfer up to 35 credits of the first associate’s degree to the Advanced and Continuous Studies, A.A.S. degree program.

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**Union County College Transcripts**

Requests for Union County College transcripts can be made by visiting the College website at https://www.ucc.edu/admissions/online-transcript-request/, or by visiting the National Student Clearinghouse at www.nationalstudentclearinghouse.org. A fee is charged for each transcript. Students with any outstanding financial obligations will not receive a transcript until all financial obligations have been met.

**Transfer Credit**

Union County College welcomes applicants transferring in from other institutions. Courses transferred must be from accredited colleges and/or universities. Students transferring to Union County College must complete a minimum of 24 credits of their degree program at Union County College, all other credits can be transferred in but must be applicable to the student’s current program of study. Non-remedial courses with a grade of “C” or better will be considered for transfer credit. All modes of instruction, including face-to-face, online, and hybrid courses, will be considered for transfer credit.

Students interested in transferring courses to Union County College must complete the College application process, and have official transcripts mailed to Union County College’s Admissions Office. Official review and granting of transfer credit will be completed by an advisor in collaboration with the appropriate Academic Dean. Awarding transfer credits will be based on program requirements, transfer regulations, and the New Jersey State Transfer guidelines at http://www.njtransfer.org/. Transfer credits awarded will be posted and can be viewed on Self Service. Grades are not transferred from other institutions. Transferred courses will be listed as "TR" for transfer credit on the student’s transcript. The office of the Vice President for Academic Affairs has the responsibility for final determination of the acceptance or denial of transfer credit.

If the student changes his/her program at any time, he/she must request to have his/her transcript re-evaluated, the transfer credits previously awarded may not apply to the student’s new program choice.

Science courses that were completed five or more years prior to being admitted to any health science program may not be eligible for transfer.

Graduates of the John H. Stamler Police Academy and/or the Union County Fire Academy will be granted advanced standing credit toward an associate degree after admission and matriculation into the Criminal Justice or Fire Science Technology program at Union County College. Each program has designated credits which will be granted – Police Academy up to 17 credits, Fire Academy up to 6 credits. It is the student’s responsibility to supply the College with proof of graduation from the academy and official transcripts of all previous college work at the institutions attended.
Withdrawal from College
Withdrawal from all courses in which a student is enrolled in a given semester/session constitutes a withdrawal from College. Withdrawal from College during the official withdrawal date set in the College’s Academic Calendar for semester/session requires that the student submit an official request for withdrawal through a drop/add withdrawal form.

Students should consult with an advisor before withdrawing. Unless this request has been completed by the student and submitted by the appropriate withdrawal dates, the withdrawal is considered “unapproved” and will result in a final grade of “F” or “UF” in all classes.

Financial aid recipients should discuss the implications of withdrawing from class with the Financial Aid Office in order to gain an understanding of any implications withdrawing has on their financial aid status.

Refund and withdrawal eligibility will be based upon the date on the drop/add or withdrawal forms. A student who withdraws from all classes within the published withdrawal dates, providing there is no violation of academic integrity, will have that withdrawal recorded as a “W” as long as all appropriate forms have been filed.

Withdrawal from Course(s)

Official Withdrawal Period
The official withdrawal period is published in the College’s Academic Calendar. Students may withdraw from a course(s) at any time during the official withdrawal dates posted for the semester/session. Students who wish to drop a course(s) must fill out a Drop/Add Courses Form and submit it to the Registrar’s office.

Please note that some courses do not run for the traditional 15 week semester and an equivalent withdrawal date is calculated and published each term. Official withdrawal can only be accomplished within the dates listed for that semester/session. These dates are identified in the College’s Academic Calendar, which is available at www.ucc.edu.

Implications of Withdrawal
Students who withdraw will have a withdrawal “W” grade recorded on their transcript. The “W” grade does not impact the student’s Grade Point Average (GPA) but it does count as having taken the course. Students may not repeat a course more than once without written approval from the Division Dean.

Students should talk to their instructor and an advisor before they consider withdrawing. Withdrawal may change eligibility for federal financial aid and a student’s status from full-time to part-time. Students participating in the Educational Opportunity Fund (EOF) must contact the EOF Office prior to submitting a request for withdrawal form. Also, students receiving Financial Aid funding must contact the Financial Aid Office prior to withdrawing from one or more courses.

An Incomplete “I” grade cannot be changed to a “W” grade.
Welcome

Welcome to Union County College Workforce Development and Career Education Programs! Our offerings include exciting continuing education, business solutions, professional development and personal enrichment programs. Whether you are exploring a new career, improving your workplace skills or looking to learn something new, Union County College has the program for you. Workforce development grant opportunities are also available. Classes are scheduled at times convenient for you – daytime, evenings and online. Programming includes youth programs, art, business, computers and technology, fitness, healthcare, languages and science.

Continuing Education

The Department provides professional development and personal enrichment opportunities for individuals who live or work in Union County and beyond. Special programs are also available for youth and senior citizens including the Union County Board of Commissioners’ Senior Scholars and College for Teens programs.

Committed to the concept of lifelong learning, the Department conveniently schedules non-credit courses in the evenings, weekends, and during daytime hours. Programs are offered at multiple campuses. In addition, courses are offered on-line through our partnership with Ed2Go at www.ed2go.com/ucc/ and www.careertraining.ed2go.com/ucc and UGotClass.

Currently, among the Continuing Education Department offerings are non-credit certificate programs in Six Sigma, Real Estate Sales, Certified Pharmacy Technician, Child Development Associate (CDA) Credential, Human Resource Management as a university partner with American Management Association (AMA), Uniform Construction Code, and Medical Billing and Coding Professional. Industry-recognized certificate programs are also available for Certified Bookkeeper, CISCO Certified Networking Associate (CCNA), Project Management Professional (PMP) Certification, Personal Trainer National Certification, Patient Care Technician, Certified Phlebotomy Technician, Certified EKG Technician, CompTIA A+ Hardware and Software and Network +, Facility Management Professional, Supply Chain Management (CSCMP) Certification, and the American Society of Administrative Professionals – Professional Administrative Certification of Excellence (PACE).

During the spring and fall, youth programs are offered virtually and in person. Academic topics include SAT Preparation, reading and math enhancement and STEM-based offerings. In addition, the department offers a wide variety of half-day programs during the summer. The College for Teens program provides career exploration training for high school students in criminal justice, healthcare and supply chain management while experiencing life on a college campus. Prominent guest speakers share their experiences and outline opportunities in their fields. The program is generously sponsored by the Union County Board of Commissioners. Continuing Education also operates as a Cisco Networking Academy in Cranford and Plainfield. We provide extensive preparation for the CISCO Certified Networking Associate (CCNA) designation. In conjunction with New Jersey City University, the New Pathways to Teaching in New Jersey (NPTNJ) alternate route teacher certification program is offered. Students are able to obtain New Jersey teacher certification upon completion of the program.

For further information, write, email, or call the Continuing Education Department at Union County College, 1033 Springfield Avenue, Cranford, NJ 07016, coned@ucc.edu, (908) 709-7600.

Industry-Business Institute

The Industry-Business Institute (IBI) at Union County College works with employer clients to help build a skilled workforce by providing workplace-specific, customized education and training programs to develop employees.

Programs are designed for maximum effectiveness and to help organizations improve productivity, quality, cost effectiveness, and morale. Professional instructors with expertise in relevant industries deliver the programs. Training is delivered on-site, on-campus or remote live, and scheduled at times that will fit office or production schedules. Training is available on a fee-for-service basis and through local and state grant opportunities. IBI provides many types of workforce development programs due to our wide network of industry professionals and instructors. Topics include, but are not limited to:

- Computer Skills
- Cultural Diversity and Harassment Prevention Awareness
- Management, Team Building, Problem Solving and Supervision Skills
- Communication and Personal Effectiveness Skills
- Workplace Literacy/Basic Skills
- Quality Practices
- Safety Procedures
- Supply Chain Management/Transportation, Logistics, and Distribution
- Lean Six Sigma
- Customer Service
- Time Management
- Conflict Resolution
- and more...

For more information, please contact Union County College, Industry-Business Institute, 40 West Jersey Street, 5th Floor, Elizabeth, NJ 07202, (908) 965-2359.
Center for Economic and Workforce Development

The Center for Economic and Workforce Development (CEWD) provides training and support services to help the unemployed and the underemployed to be better positioned to enter and compete in today’s workforce as well as develop lifelong learning skills.

The Center offers a wide variety of programs and courses to over 4,000 adults each year. The Center model includes standardized assessment, student support services, occupation-related basic skills instruction, occupational training, and job placement services. In keeping Union County College’s commitment to provide access to education for all, CEWD instruction is scheduled during the evenings, weekends and daytime hours so that adults can choose a schedule most convenient for themselves and their lifestyles. The Center for Economic and Workforce Development services are located on both the Elizabeth and Plainfield campuses which are equipped with state-of-the-art computer labs and offer full service operations to all CEWD students.

CEWD offers the following programs:

- **ABLE PLUS GRANT**: This WIOA Title II program offers career pathway ESL, Integrated ESL and Civics Education, Adult Basic Skill development and High School Diploma (HSD) preparation to eligible residents. These educational programs are funded through the New Jersey Department of Labor and Workforce Development.

- **To-Work /Community Work Experience Program**: This program provides eligible WFNJ participants the opportunity to develop skills that will enable them to find and maintain employment. Participants are placed on a non-profit/community-based organization site to practice and hone their employability skills. This program must be combined with Basic Skills, GED or ESL classes.

- **English-as-a-Second Language**: The Center offers individuals who need to develop their English proficiency to levels where they will be able to meet the requirements for the Institute for Intensive English (IIE). The two beginning levels of English as a Second Language (ESL) support the development of English proficiency skills and move students from the lowest levels of English to levels 3 to 6 of the Institute for Intensive English. These courses are designed to provide levels 1 and 2 English proficient students with 135 hours of intensive instruction that focus on the fundamentals of the English Language with an emphasis on speaking, comprehension, and writing. In conjunction with each classroom lesson, there is an opportunity for students to review and reinforce the concepts presented through the use of ESL software available in the state-of-the-art computer labs. Upon completion of the final course of the Level 2 program, instructor recommendations, post-test scores, and the course final grade will determine if students advance to the IIE Level 3 credit program.

- **Occupational Training**: The Center provides occupational training programs that lead to industry credentials in demand occupations such as:
  - Administrative Assistant
  - Accounting Technician
  - Customer Service Representative
  - Patient Care Technician
  - Pharmacy Technician
  - Essentials of Supply Chain Management

These programs are offered to American Job Center, Career One Stop eligible participants (i.e., WIOA, TRA, DVRS and WDP participants) or to individuals who wish to pay. Industry-valued credentials will be earned through these programs.

For more information on the Center for Economic and Workforce Development programs call 908-659-5114 or email CEWD-Recruiting with inquiries: CEWD-Recruiting@ucc.edu

In conjunction with an experienced administrative, support staff and qualified instructors, the Center has an active Job Development team who work with local employers to identify qualified candidates and our students in seeking and obtaining employment with these employers. As a Union County One Stop Career Center partner, the Center regularly supports the County’s Social Service Agencies with activities geared to increasing the productivity and employability of the agencies’ participants and Union County residents. Additionally, the College, through the Center for Economic and Workforce Development, Continuing Education and Industry-Business Institute departments, supports the implementation of the Workforce Innovation Business Center initiative, an American Job Center Affiliate Career Services Center, through the Union County Workforce Development Board.
Special Programs and Services

American Honors

American Honors is a program for high-achieving, academically motivated students looking to attend and graduate from Union County College, and then transfer to a four-year university. Students in this program enroll in a Union degree program and take honors courses to fulfill their general education and program requirements. Honors classes are limited to 20 students and are taught by dedicated and high-quality faculty who emphasize critical thinking, analytical writing, and effective communication. Students who take these classes are exceptionally well prepared for transfer to four-year colleges and universities, for scholarships, and for success at their transfer institutions.

American Honors students receive intrusive advising and wrap-around professional support to ensure their success in the classroom and in the UCC community. Students in the American Honors program are engaged with a community of scholars. They collaborate daily with similarly focused peers in the Honors Lounge, at American Honors events, and on projects in and out of the classroom. American Honors students serve as leaders of on-campus organizations, like the Academic Learning Center, Phi Theta Kappa, and the Student Government Association. They frequently take advantage of research opportunities with faculty and staff. This engagement helps students build strong resumes and competitive applications when they apply to transfer institutions.

Students who join American Honors have a history of taking Honors and Advanced Placement (AP) classes in high school. They are often actively engaged in their school and/or local community. Many students are also members of NJ Stars and as a result, have their tuition covered. American Honors students pay the same tuition rate as all Union students and have an additional one-time program participation fee. Applicants to the program should have a minimum cumulative 3.25-grade point average (GPA) on a 4.0 scale, possess a high school diploma (or equivalent), and plan to enroll full-time in a transferable degree. American Honors students receive intrusive advising and wrap-around services.

Eligibility Requirements: Students interested in being considered for the American Honors program should have a minimum cumulative 3.25-grade point average (GPA) on a 4.0 scale, possess a high school diploma (or equivalent), and plan to enroll full-time in a transferable degree and have an additional one-time program participation fee. Applicants to the program should have a minimum cumulative 3.25-grade point average (GPA) on a 4.0 scale, possess a high school diploma (or equivalent), and plan to enroll full-time in a transferable degree.

Exemptions: All first-time full-time students are required to take UCC 101 except for:
- Students taking fewer than 12 credits;
- Students who transfer from other institutions with 15 or more credits;
- Students who transfer from other institutions with 2 or more credits in a first-year seminar course;
- Students with a college degree;
- Students who have successfully completed ENG 101 or ENG 112, and MAT 119;
- Students with visitor status;
- Students in diploma programs;
- Students in certificate programs;
- Senior citizens.

The Educational Opportunity Fund Program

The mission of the Educational Opportunity Fund (EOF) Program at Union County College is to provide students from disadvantaged communities, who demonstrate the potential for academic success, an opportunity to attend college. Our purpose is to help students successfully graduate and transfer students to four-year institutions, as well as provide a high level of preparation and readiness for the workforce.

What services or benefits are offered to Union County College EOF students?

- Comprehensive summer orientation for first year students
- Registration, Career, Transfer and Financial Aid advisement from a personal EOF Advisor
- Leadership Activities and Workshops
- Academic Support through tutoring and supplemental instruction
- Opportunity to join the Chi Alpha Epsilon National Honor Society
- An additional financial aid grant of $100-$625 a semester

Eligibility Requirements: Students interested in being considered for the EOF Program at Union County College must fulfill the following requirements:

- Meet the financial eligibility requirements for 2021-22 Academic Year as defined by the State of New Jersey Office of the Secretary of Higher Education – (www.state.nj.us/highereducation/EOF/EOF_Eligibility.shtml)
- Be a full-time student (minimum 12 credits) for the semester of consideration for EOF
- Be a New Jersey resident for at least one year prior to enrollment
- Complete the 2021-22 Free Application for Federal Student Aid (FAFSA) – (www.fafsa.gov)
- Be eligible for state aid from the NJ Higher Education Student Assistance Authority – (www.hesaa.org)
- Have completed the Directed Self-Placement (DSP) questionnaire and placed into ENG 096 or higher; or ESL placement level 5 or 6
- For current students, have a minimum 2.5 GPA (including any developmental courses) and no more than 30 college credits

How to Apply for EOF: Interested students must complete an EOF application and submit all required supporting documentation listed on the application. Students will not be considered for acceptance until all
required supporting documentation has been submitted. The EOF application can be downloaded from the following site:

- EOF Summer Program – https://www.ucc.edu/admissions/educational-opportunity-fund/

Priority for acceptance into the EOF Program is given to first-time, full-time college students.

To learn more about the Educational Opportunity Fund Program, contact us at (908) 709-7088 or email us at eof@ucc.edu.

### Honor Societies

#### Chi Alpha Epsilon

The Psi Chapter of the Chi Alpha Epsilon Academic Honor Society is a national honor society for students in the Educational Opportunity Fund Program. EOF students who hold a 3.0 cumulative GPA for two consecutive semesters with a minimum of 18 college credits are eligible to be members. The purpose is to promote continued high academic standards, foster increased communication among its members, and honor the academic excellence of those students admitted to college via developmental program pathways.

#### The Engineering and Architectural Honor Society

The Engineering and Architectural Honor Society is for students in an A.S. Engineering or Architecture program. Membership is extended by nomination of the Engineering/Technology/Architecture faculty to students who have completed at least 15 credits of the required courses in their major program with at least a 3.5 GPA in that program.

#### Mu Alpha Theta

Students with a strong interest and ability in mathematics are recognized through admission to Mu Alpha Theta. Mu Alpha Theta is a national honor society which promotes scholarship in mathematics at two-year colleges. Requirements for admission are a 3.5 average of any credit mathematics course, an overall 3.25 cumulative average, and finishing at least MAT 144 or above.

#### Phi Theta Kappa

Students who achieve outstanding scholastic records and demonstrate qualities of good citizenship receive recognition through admission into Phi Theta Kappa. Phi Theta Kappa is the international honor society which aims to promote scholarship, develop character, and cultivate fellowship among students of two-year colleges. Iota Xi is the chapter of Phi Theta Kappa at Union County College. All students who have earned 12 transferable credits at Union County College with a cumulative average of 3.6 are eligible for admission into Iota Xi Chapter.

#### Psi Beta

Psi Beta is a national honor society in psychology associated with the American Psychological Association. It was founded expressly for community and junior colleges. The purpose of Psi Beta is to promote, encourage, and recognize scholarship for students in psychology. The local chapter encourages member participation in workshops, seminars, conferences, and other educational experiences, as well as service to the community. Membership requirements are, at minimum, an overall average of 3.25 GPA, a least 12 credits, and at least one course in psychology with an overall grade of “B” or better in each psychology course.

#### Tau Alpha Pi

Tau Alpha Pi, New Jersey Beta Chapter. The Tau Alpha Pi National Honor Society is a national honor society for students matriculated in an AAS Engineering Technology program. Membership is extended by nomination of the Engineering/Technology/Architecture faculty to students who have completed at least 15 credits of the required courses in their major program with at least a 3.0 GPA in that program.

#### Lambda Epsilon Chi

Lambda Epsilon Chi is a nationally known academic honor society for paralegal students. Sponsored by the American Association for Paralegal Education (AAfPE), the society offers national scholarship opportunities, participation in regional, state and local conferences, and networking opportunities. Candidates for membership in Lambda Epsilon Chi must be in good academic standing and have completed at least two-thirds of their paralegal coursework. Candidates also must have a cumulative GPA of 3.5 or higher.

#### NJ Sea Grant Consortium

Union County College is a member of the New Jersey Sea Grant Consortium, which affords students the opportunity to become acquainted with the marine environment through summer credit course offerings. The offerings supplement the science curricula at the College and increase the course options available for students.

#### Developmental Sequence

Developmental courses are available to help students build reading, writing, and/or mathematics skills, if needed, before enrolling in college-level English composition or math courses. Students are strongly encouraged to stay in close contact with an advisor. Advisors can help students to stay focused on academic success and timely completion of the required courses for the major. Students may contact an advisor or the appropriate Division Dean for more information.

#### Mathematics

Students who are enrolled in programs that do not require calculus have the option of registering for college-level math (MAT 125 or MAT 127) or developmental level math (MAT 017). Access to this option is made through a meeting with an advisor.

Students who are enrolled in programs that require calculus have the option of registering for college level math (MAT 119) or developmental math (MAT 019). Access to this option is made through a meeting with an advisor.

Please visit https://www.ucc.edu/campus-life/student-services/testing/ for additional information.
Reading and Writing

Students will complete a Directed Self-Placement questionnaire to determine their English course placement prior to registration. At the start of each developmental English course, students will complete a writing sample. The work will be evaluated and, if appropriate, the student will be placed directly into a higher-level course. Students may contact the Humanities Division Office for more information.

English for Speakers of Other Languages

The Institute for Intensive English provides a program of intensive instruction in English for speakers of other languages. Through this program, students have the opportunity to enhance their English language abilities in order to further their academic, career, and/or personal goals.

After placement testing, students enter an appropriate ESL level of instruction commensurate with their abilities. In all levels, students may register for two core English for Academic Purposes (EAP) courses: Grammar/Writing and Reading/Listening/Speaking.

Upon completing each course, there is an exit test to assess a student's proficiency. While enrolled in ESL courses, students can take additional content area courses, depending on a student's level:

Level 3 Students:
- Mathematics courses with special permission only and based on major or Directed Self-Placement questionnaire;

Level 4 Students:
- Mathematics courses with special permission only and based on major or Directed Self-Placement questionnaire, FIA 109-Introduction to Drawing, FIA 110-Introduction to Painting;

Level 5 Students:
- AUT 100-Automotive Fundamentals, BSM 101-Introduction to Sport Management, FIA 109-Introduction to Drawing, FIA 110-Introduction to Painting, MET 109-Computer-Aided Drafting, EGG 111-Engineering & Computer Graphics, HSM 100-Introduction to the Hospitality Industry, as well as other courses with permission from the IIE director.

Level 6 Students:

Please be advised that New Student Orientation is required for all first-time students who intend to enroll full-time.

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<th>Developmental Mathematics</th>
<th>Developmental Reading</th>
<th>Developmental Writing</th>
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<td>ENG 081</td>
<td>ENG 091</td>
<td>ENG 096</td>
<td>ESL 067 and ESL 068</td>
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<td>or MAT 019**</td>
<td>with ENG 101</td>
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<td>or MAT 022</td>
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<td>3. MAT 021</td>
<td>ENG 097</td>
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<td>4. Credit Mathematics</td>
<td>ENG 101</td>
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* For Non-STEM majors: upon completion of MAT 017 register for MAT 125 or MAT 127.

** For STEM majors: upon completion of MAT 021 register for MAT 119

Language Requirements

The Languages offered by the College are Spanish, French, Italian, German, Mandarin Chinese, and Arabic.

GENERAL POLICIES CONCERNING LANGUAGE PLACEMENT

Language Placement Guide for American High School Graduates

Beginning (101/102) Level: Fewer than Three Years of Language in High School

Conversation (105/106) Level: At least two years of Language in High School

Intermediate (111/112) Level: Three Years of Language in High School

Advanced (121/122) Level: Four or More Years of Language in High School

ESL Students are Not Required to Take Modern Language – All ESL students who have completed that program are exempt from the English program Modern Language requirement. They may, however, elect to study a language, including their native language, if placed at their appropriate level of competence. In any case, they must complete their general education humanities course requirements.

Native Speakers may not take elementary level courses of their native language – Native speakers may not enroll in the elementary level of their native language. They may not take language courses designated as 101, 102, 105, and 106. They require permission of the Division Dean to enroll at the Intermediate Level Language (courses designated 111 or 112).

Language Exemption does not mean that credit is given for the courses exempted – Students exempt from taking a given language may consider taking some other language or they may fulfill their humanities general education requirements by substituting other courses in the humanities/history category. Language exemptions do not entail college credits for the courses exempted.

Many Associate in Arts Programs Require 2 or 3 semesters of a Modern Language – Please review specific requirements in each program.

Modern Language Placement – Students who qualify for the intermediate or advanced level of a Modern Language in their freshman year will be placed accordingly.
Distance Education

Distance education at Union County College provides an educational experience that is equivalent to traditional courses. Distance learning courses cover the same course subject matter, carry the same credits, and are taught by highly qualified Union County College faculty. Courses are available in the fall, winter, spring, and summer sessions.

Why study online?
- Convenience
- Flexibility
- Accessibility
- Improve technical skills
- Avoid commuting
- Career Advancement

Who studies online?
- Working men and women
- Adult learners
- Single and stay at home parents
- Job candidates
- Active military deployed overseas
- Veterans
- Traditional students

Is online learning a good fit for you?
- Are you self-disciplined and motivated?
- Are you able to commit time each day or week to your online course(s)?
- Do you have good reading, writing, and communication skills?
- Are you comfortable seeking help when needed?
- Will you miss the experience of sitting in a classroom?
- Are you comfortable using computers?

Degrees offered fully online:
- Blockchain Technology, Certificate of Achievement
- Business, AA
- Business Fundamentals, Certificate of Achievement
- Business Management, AAS
- Business Marketing, AAS
- Computer Information Systems & Technology, AS
- Criminal Justice, AS
- Criminal Justice, Certificate
- Health Science, AS
- History, AA
- Homeland Security, Certificate of Achievement
- Liberal Arts, AA
- Liberal Studies, AS
- Liberal Studies, Certificate
- Public Administration, AA
- Psychology, AA
- Social Services, AS
- Sociology, AA
- Supply Chain Management, AS
- Supply Chain Management, Certificate of Achievement

Online course:
- Offered entirely online with no on campus requirements; no set meeting time
- Requires the use of a computer (Windows 7 & above; iOS Mavericks 10.9 and newer)
- HD 128 X 720p Camera/Microphone (built in or add on)
- Assignments and assessments have specific due dates
- Requires students to verify identity using digital imaging, photo ID, and a knuckle scan
- Requires students to submit verified assignments using specialized software
- May require the use of third party course packages, web based tools, etc.
- Section numbers: Regular Start: 300, 301, 302 (Example: CST-100-300); Late Start: 310, 311 (CST-100-310)

Verification and Online Integrity
- Online students are required to provide photo ID and a knuckle scan during the first week of classes
- All online students must verify their identity once a year
- Students need to verify only once per year; it applies to all online courses
- Students can participate in their online course while verification is being processed
- Questions about student identification and verification should be directed to the Distance Education department, (908) 497-4364.

Fees:
There may be additional fees for online courses.

Do I have to be a computer expert to take an online course?
No, but at a minimum, you must be able to access the Internet, locate and upload an attachment to email, send and receive email with attachments, and create, save and open documents. Smart phones and tablets may not be suitable for your course. Students need daily access to the internet, a working computer camera, and a working computer microphone. Students must have a photo ID and produce a knuckle scan to verify identity. Courses are held entirely online.

FERPA and ADA:
All online courses protect student privacy and provide ADA accommodations.

Questions about student identity verification, online course integrity, FERPA, and ADA in online courses should be directed to the Distance Education office located in the basement of the Cranford Library, L-22, by phone at 908-497-4364 or by email at ucconline@ucc.edu.
Dual Admissions Agreements

Alumni of Union County College, including students of its predecessor schools (the former Union College and Union County Technical Institute), have transferred with advanced standing to more than 500 colleges and universities in the United States.

Today, Union County College has dual admissions and direct transfer/articulation agreements with a growing list of colleges and universities as well as transfer agreements with New Jersey state colleges. Students planning to transfer to a four-year college or university should see an advisor for specific information on these transfer opportunities.

Caldwell University
Union County College students who enroll in the joint admissions program with Union County College and Caldwell University should be guaranteed admissions as juniors provided they have completed an Associate Degree and fulfill all the necessary criteria of the dual admissions program.

Delaware State University
Union County College students who enroll in the joint admissions program with Union County College and Delaware State University should be guaranteed admissions as juniors provided they have completed an Associate Degree and fulfill all the necessary criteria of the dual admissions program.

Delaware Valley University
Union County College students who enroll in the joint admissions program with Union County College and Delaware Valley University should be guaranteed admissions as juniors provided they have completed an Associate Degree and fulfill all the necessary criteria of the dual admissions program.

Fairleigh Dickinson University
Union County College students who enroll in the joint admissions program with Union County College and Fairleigh Dickinson University should be guaranteed admissions as juniors provided they have completed an Associate Degree and fulfill all the necessary criteria of the joint admissions program.

Georgian Court University
Georgian Court University will reserve a place for Union County College students enrolled in the joint admissions program. The student will be enrolled in a parallel program of choice and will be accepted with full junior standing. The student must complete the Associate Degree under which they were accepted at Union County College and fulfill the criteria of the joint admissions program.

Kean University
Union County College students who enroll in the joint admissions program with Kean University will be granted admissions as juniors in the agreed upon undergraduate program, provided they have met the applicable admission requirements of Kean University and the minimum GPA at all post-secondary institutions attended.

Montclair State University
Union County College students who enroll in the joint admissions program with Union County College and Montclair State University should be guaranteed admissions as juniors to select programs provided they have completed an Associate Degree and fulfill all the necessary criteria of the dual admissions program.

Students enrolled at Union County College fall 2019 or after pursuing an AA degree in Education (Grades 4-12) or Early Childhood Elementary Education (Grades PreK-3) will be eligible to pursue automatic transfer to Montclair State University upon completion of the Associate’s degree (AA). Students will be considered to be dually enrolled at both institutions provided Montclair State University admissions criteria are met at time of degree attainment from Union.

Rutgers – The State University of New Jersey
The Rutgers University Dual Degree Program (DDP) provides New Jersey high school graduates with an opportunity to earn a baccalaureate degree at Rutgers University by first earning an Associate Degree at Union County College. Application must be made to Rutgers University. Once admitted, students follow a Recommended Transfer Program (RTP). To determine the equivalency between Union County College courses and Rutgers courses visit NJ Transfer (www.njtransfer.org). Successful completion of an Associate Degree at Union will guarantee admission to Rutgers as a third-year student, provided that an overall cumulative grade point average of at least 3.00 has been achieved in the RTP.

Union County College students who enroll in the Dual/Joint Admissions Program with Union County College and Rutgers University should be guaranteed admission as juniors provided they have completed an Associate Degree and fulfilled the necessary criteria.

Saint Elizabeth University
Saint Elizabeth University will reserve a place for Union County College students enrolled in the joint admissions program for a Bachelor of Science in Business Administration or the Bachelor of Arts in Justice Studies. The student will be enrolled in a parallel program, and will be accepted with full junior standing. The student must complete the Associate Degree under which they were accepted at Union County College and fulfill the criteria of the joint admissions program.
Transfer/Articulation Agreements

A vital part of Union County College’s mission is to transfer its graduates with junior-year status to four-year colleges and universities throughout the United States and abroad. Over the years, the College has compiled an enviable record in carrying out this goal, as graduates have transferred to more than 500 colleges and universities throughout the world. Articulation agreements are designed to facilitate transfer to specific colleges and programs, but our students are not limited to transferring only to these institutions:

- Berkeley College, New York, NY
- Bethune-Cookman University, Daytona Beach, FL
- Binghamton University, State University of NY, Binghamton, NY
- Bloomfield College, Bloomfield, NJ
- Caldwell University, Caldwell, NJ
- Cazenovia College, Cazenovia, NY
- Centenary College, Hackettstown, NJ
- College of Mount Saint Vincent, Riverdale, NY
- Delaware State University, Dover, DE
- Delaware Valley University, Doylestown, PA
- Dickinson College, Carlisle, PA
- Fairleigh Dickinson University, College at Florham, Madison, NJ; Metropolitan Campus, Teaneck, NJ (See information on dual admissions)
- Felician University, Rutherford, NJ
- Georgian Court University, Lakewood, Woodbridge, NJ (See information on dual admissions)
- Howard University, Washington, DC
- John Cabot University, Roma, Italy
- John Jay College of Criminal Justice (CUNY), New York, NY
- Kaplan University, Iowa and Nebraska
- Kean University, Union, NJ (See information on dual admissions)
- Laboratory Institute of Merchandising, New York, NY
- Manhattan College, Riverdale, NY
- Montclair State University, Montclair, NJ (See information on dual admissions)
- Moravian College, Bethlehem, PA
- Mount Aloysius College, Cresson, PA
- National University of Health Sciences, Lombard, IL
- New Jersey City University, Jersey City, NJ
- New Jersey Institute of Technology, Newark, NJ
- Pace University, New York, NY, and Pleasantville, NY
- Palmer College of Chiropractic, Davenport, IA
- Pillar College, Newark, NJ
- Rochester Institute of Technology, School of Engineering, Rochester, NY
- Rutgers – The State University of New Jersey, New Brunswick, NJ (See information on dual admissions)
- Sacred Heart University, Fairfield, Connecticut
- Saint Elizabeth University, Convent Station, NJ (See information on dual admissions)
- Saint Leo University, Saint Leo, FL
- Saint Peter’s University, Jersey City, NJ
- School of Visual Arts, New York, NY
- Seton Hall University, South Orange, NJ
- Springfield College, School of Human Services, Springfield, MA
- St. Francis College, Brooklyn Heights, NY
- St. John’s University, Staten Island, NY
- State University of New York, Institute of Technology at Utica/Rome, Utica, NY
- Stockton University, Galloway Twp, NJ
- Strayer University, FL
- Syracuse University, Syracuse, NY
- Thomas Edison State University, Trenton, NJ
- Tuskegee University, Tuskegee, AL
- University of Phoenix, Phoenix, AZ
- University of Pittsburgh at Bradford, Bradford, PA
- University of Vermont, Burlington, VT
- Western Governors University, Salt Lake City, UT
- Western New England University, Springfield, MA
- Widener University, Chester, PA
- Wilberforce University, Wilberforce, OH
- William Paterson University, Wayne, NJ

* Contact Union County College for the most current information.
All matriculated students, whether they plan to transfer to a four-year institution or complete their college careers at the end of their programs, are eligible for the Associate degree, the Certificate, or the Diploma if all graduation requirements set forth in this catalog have been met. The curriculum programs are offered as guidelines and courses do not necessarily need to be taken in the order suggested. Please note, however, that many courses require prerequisites or corequisites.

ASSOCIATE IN ARTS – A.A.

The Associate in Arts degree (A.A.) is an undergraduate academic degree awarded by Union County College upon completion of a course of study usually lasting two to three years full-time and three or more years part-time. It is equivalent to the first two years of a four-year college or university degree. This degree is intended for students who wish to graduate from Union County College, then transfer to a four-year college or university upon graduation.

The programs leading to the Associate in Arts degree parallel those offered in the freshman and sophomore years at four-year institutions. Students who satisfactorily complete their chosen programs will be able to continue their college education into their junior and senior years at four-year colleges or universities. The Associate in Arts degree is conferred upon completion of one of the following two-year programs:

- Business
- Communications
- Early Childhood Elementary Education, option offered through Liberal Arts
- Education, option offered through Liberal Arts
- English
- Graphic Design, option offered through Liberal Arts
- History
- Journalism and Public Relations option offered through Communications
- Liberal Arts
- Media, option offered through Communications
- Psychology, option offered through Liberal Arts
- Public Administration, option offered through Business
- Sociology, option offered through Liberal Arts
- Theater Arts, option offered through Liberal Arts
- Visual Arts, option offered through Liberal Arts

ASSOCIATE IN SCIENCE – A.S.

The Associate in Science degree (A.S.) is awarded to students who are interested in earning an Associate's degree at Union County College, then transferring to a four-year college or university. The area of concentration is usually in mathematics, natural sciences, or technology. It is the equivalent of the first two years of a four-year college or university degree. This degree is intended for students who wish to transfer to a four-year college or to find a job upon graduation.

- Nursing, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging
- Nursing, Trinitas School of Nursing
- Psychosocial Rehabilitation and Treatment
- Radiography, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging
- Sonography, Diagnostic Medical, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging

The Associate in Science degree is conferred upon the completion of the following programs:

- American Sign Language and Deaf Studies
- Architecture, option offered through the Professor Elmer Wolf Engineering Program
- Biology
- Chemistry
- Computer Information Systems and Technology
- Computer Science
- Computer Science/Engineering, option offered through the Professor Elmer Wolf Engineering Program
- Criminal Justice
- Cybersecurity, option offered through Mathematics
- Engineering, the Professor Elmer Wolf Engineering Program
- eSports Management, option offered through Sport Management
- Health Science
- Liberal Studies
- Mathematics
- Mathematics Education, option offered through Mathematics
- Medicinal Plant Chemistry, option offered through Biology
- Paralegal Studies
- Social Services
ASSOCIATE IN SCIENCE – A.S. cont’d

- Sport Management
- Supply Chain Management
- Sustainability Science, option offered through the Professor Elmer Wolf Engineering Program
- Web and Mobile Application Development
- Paramedic Emergency Health Science
- Hotel, Restaurant, and Tourism Management
- Health Information Technology
- Game Design and Development
- Fire Science Technology
- Drone Design and Applications
- Business Marketing
- Blockchain Technology
- Business Fundamentals
- CAD-CAM
- Educational Interpreter Program (EIP)
- Emergency Medical Studies
- eSports Management
- Homeland Security
- Paralegal Studies
- Supply Chain Management

CERTIFICATE OF ACHIEVEMENT – CT.A.

The Certificate of Achievement is for students who want to enhance their career options and enter the workforce at a faster pace.
- Blockchain Technology
- Business Fundamentals
- CAD-CAM
- Educational Interpreter Program (EIP)
- Emergency Medical Studies
- eSports Management
- Homeland Security
- Paralegal Studies
- Supply Chain Management

ASSOCIATE IN APPLIED SCIENCE – A.A.S.

The Associate in Applied Science degree (A.A.S.) is awarded to students who are interested in entering the workforce upon graduation. These career oriented courses of study provide hands-on experience.

The Associate in Applied Science degree is conferred upon completion of the following programs:
- Accounting
- Advanced and Continuous Studies
- Automotive Technology
- Blockchain Technology
- Business Management
- Business Marketing
- Cyber Forensics
- Drone Design and Applications
- Engineering Technology
- Fire Science Technology
- Game Design and Development
- Health Information Technology
- Hotel, Restaurant, and Tourism Management
- Paramedic Emergency Health Science, Robert and Freda Brown Paramedic Program
- (A.A.S.) is awarded to students who are
- Career-oriented courses of study provide hands-on experience.
- Students who would like to transfer should meet with an academic advisor to ensure that all necessary requirements are met.

Course substitutions and waivers

While the course requirements specified in the following curriculum descriptions are normally required, students may request to waive or substitute courses which are available infrequently. Students wishing to do so should see the appropriate Division Dean or Vice President for Academic Affairs for approval.

Course waivers will be given at the discretion of the involved Division. It is strongly recommended that students obtain course waivers before registering for the substitute course.

ALPHABETICAL PROGRAM LIST

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REQUIREMENTS FOR ALL PROGRAMS

GENERAL EDUCATION

Programs leading to the Associate in Arts (A.A.), Associate in Science (A.S.), and Associate in Applied Science (A.A.S.) include a distribution of General Education courses in the categories of:

1. Communications (courses enhancing written and oral communication in the English Language);
2. Mathematics, Science, and Technology (courses enhancing mathematical and scientific conceptual understanding and application, including knowledge of computers);
3. Social Science (courses enhancing social awareness, including social, economic, and political problems, and the responsibilities of citizenship in an interdependent world);
4. Humanities (broad-based courses in literary, philosophical, foreign language, historic, aesthetic, or other humanistic studies enhancing understanding and transmitting values of one’s own culture as well as other cultures);
5. History (broad-based courses in historical perspective which may be sequence or survey in World, Western, non-Western, or American History);
6. Diversity (courses whose purpose is to expose students to a multicultural society or people).

The General Education requirements vary according to the degree program. A.A. Programs require 45 general education credits; A.S. Programs require 30; and A.A.S. Programs require 20. No more than 16 hours in one discipline (e.g., English, Chemistry, Psychology, History) may be counted toward the general education requirement for each degree.

Certificate Programs require 6 General Education credit hours including one Communications course. Diploma Programs require 10 General Education credit hours.

Students should choose their general education courses based upon the degree sought and their transfer plans. Advisors will work with students to design a personalized plan of study.

General Education courses are marked with a ▲ in the course description section of the catalog. A list of General Education courses by category follows. General Education requirements for each degree program are summarized in the table below:

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<td>SOC 206</td>
<td>Minorities in American Life</td>
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<td>SOC 207</td>
<td>Social Inequality</td>
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<td>SOC 219</td>
<td>Gender and Work</td>
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<td>Introduction to Urban Studies</td>
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<td>FIA 117</td>
<td>Survey of Music in the Twentieth Century</td>
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<td>FIA 124</td>
<td>Theater Appreciation</td>
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<td>FIA 132</td>
<td>Introduction to Dramatic Literature</td>
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<td>FIA 220</td>
<td>Introduction to History of Photography</td>
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<td>FIA 232</td>
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<td>PHI 205</td>
<td>Introduction to Philosophy</td>
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<td>PHI 212</td>
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<tr>
<td>ENG 205</td>
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<td>ENG 206</td>
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<td>ENG 216</td>
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<td>ENG 217</td>
<td>Literature and the Arts I</td>
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<tr>
<td>ENG 218</td>
<td>Literature and the Arts II</td>
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<td>ENG 227</td>
<td>African American Literature I</td>
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<td>ENG 228</td>
<td>African American Literature II</td>
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<tr>
<td>ENG 235</td>
<td>Introduction to Shakespeare</td>
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<tr>
<td>ENG 245</td>
<td>Women in Literature</td>
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<tr>
<td>ENG 247</td>
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<td>HISTORY:</td>
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<td>HIS 101</td>
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<td>HIS 102</td>
<td>Introduction to Western Civilization II</td>
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<tr>
<td>HIS 103</td>
<td>Introduction to World History I</td>
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<td>HIS 104</td>
<td>Introduction to World History II</td>
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<tr>
<td>HIS 105</td>
<td>Afro-American History I</td>
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<tr>
<td>HIS 106</td>
<td>Afro-American History II</td>
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<tr>
<td>HIS 201</td>
<td>United States History to 1865</td>
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<td>HIS 202</td>
<td>United States History Since 1865</td>
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<tr>
<td>HIS 209</td>
<td>Twentieth Century European History</td>
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<tr>
<td>HIS 215</td>
<td>The American Experience in the Twentieth Century</td>
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<tr>
<td>HIS 225</td>
<td>Women in American History</td>
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<tr>
<td>HIS 230</td>
<td>Latin American History</td>
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<tr>
<td>HIS 270</td>
<td>The Classical Heritage of Greece and Rome</td>
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<td>MORAL LANGUAGE:</td>
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<td>ARB 101</td>
<td>Beginning Arabic I</td>
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<td>CHN 111</td>
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<td>CHN 112</td>
<td>Intermediate Mandarin Chinese II</td>
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<tr>
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<td>FRE 102</td>
<td>Beginning French II</td>
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<td>FRE 111</td>
<td>Intermediate French I</td>
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<tr>
<td>FRE 112</td>
<td>Intermediate French II</td>
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<td>FRE 122</td>
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<td>GER 101</td>
<td>Beginning German I</td>
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<td>HUMANITIES COURSES:</td>
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<tr>
<td>COM 109</td>
<td>Introduction to Film Study</td>
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<tr>
<td>FIA 105</td>
<td>Music Appreciation</td>
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<tr>
<td>FIA 108</td>
<td>Appreciation of Art</td>
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<tr>
<td>FIA 111</td>
<td>Art History Survey I</td>
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<tr>
<td>FIA 112</td>
<td>Art History Survey II</td>
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</table>
REQUIREMENTS FOR ALL PROGRAMS

GENERAL EDUCATION  cont’d

GER 102  Beginning German II
ITA 101  Beginning Italian I
ITA 102  Beginning Italian II
ITA 111  Intermediate Italian I
ITA 112  Intermediate Italian II
SPA 101  Beginning Spanish I
SPA 102  Beginning Spanish II
SPA 109  Spanish Grammar and Composition for Hispanics
SPA 111  Intermediate Spanish I
SPA 112  Intermediate Spanish II
SPA 121  Advanced Spanish I
SPA 122  Advanced Spanish II

MATHEMATICS, SCIENCE AND TECHNOLOGY COURSES:

MATH:
MAT 113  Math Applications (for A.A.S. degrees only)
MAT 119  Algebra
MAT 125  Survey of Special Topics in Mathematics
MAT 127  Elementary Statistics
MAT 143  Elementary Mathematical Analysis I
MAT 144  Elementary Mathematical Analysis II
MAT 146  Brief Calculus with Applications
MAT 155  Elementary Mathematical Analysis
MAT 171  Unified Calculus I
MAT 172  Unified Calculus II
MAT 246  Business Statistical Analysis
MAT 265  Linear Algebra
MAT 267  Discrete Mathematics
MAT 271  Unified Calculus III
MAT 272  Differential Equations

LAB SCIENCE:
AST 101  Astronomy of the Solar System
AST 102  Astronomy Beyond the Solar System
BIO 101  Introduction to Biology
BIO 102  Human Biology
BIO 103  Environmental Science
BIO 104  A Survey of the Animal Kingdom
BIO 105  Anatomy and Physiology I
BIO 106  Anatomy and Physiology II
BIO 108  Microbiology
BIO 110  Human Heredity
BIO 111  General Biology I
BIO 112  General Biology II
BIO 204  Introduction to Marine Biology
BIO 208  Ecology
BIO 240  Genetics
CHE 101  College Chemistry
CHE 105  Chemistry-Health Sciences
CHE 107  The Chemistry of Forensic Science
CHE 111  General Chemistry I
CHE 112  General Chemistry II
CHE 113  Principles of Inorganic Chemistry
CHE 114  Principles of Organic Chemistry and Biochemistry
CHE 211  Organic Chemistry I
CHE 212  Organic Chemistry II
GEY 101  Physical Geology
GEY 102  Historical Geology
MTR 101  Introduction to Meteorology
PHY 101/PHYL 111  General Physics I and Mechanics Lab
PHY 102/PHYL 102  General Physics II and Lab
PHY 111/PHYL 111  Mechanics and Mechanics Lab
PHY 125/PHYL 125  Elements of Physics and Lab
PHY 201/PHYL 201  Electricity and Magnetism and Lab

TECHNOLOGY:
COM 100  Communications Technologies
CST 100  Introduction to Computer Applications
CST 101  Introduction to Computer Systems
CST 115  Introduction to Computer Programming
CST 120  The Internet
CST 161  Computer Programming Fundamentals
CST 226  Introduction to Operating Systems

SOCIAL SCIENCE COURSES:
ECO 201  Principles of Economics I
ECO 202  Principles of Economics II
GEO 201  World Geography
GOV 201  American Government and Politics
GOV 202  American National Government
GOV 205  Comparative Governments
GOV 207  International Politics
PSY 101  General Psychology
PSY 102  Psychology of Personality
PSY 204  Lifespan Development
PSY 205  Child Psychology
PSY 206  Adolescent Psychology
PSY 212  Psychology of Adulthood and Aging
SOC 101  Principles of Sociology
SOC 273  Marriage and the Family
Graduates of this Associate in Applied Science degree program are prepared for employment as junior accountants with large corporations. The program provides some of the needed academic background for a C.P.A.

Graduates may seek employment in industrial or general accounting or work in areas such as credit, collections (internal), governmental accounting, or payroll supervision. Transfer of credits to a four-year college is conditional upon the receiving college or university. Consult with a transfer advisor for more details.

Upon successful completion of all program requirements, graduates will be able to:

• Demonstrate the underlying theoretical and ethical framework of accounting concepts in business practice;
• Evaluate the managerial application of accounting data and its intended impact;
• Examine the governing principles of the practice of accounting;
• Communicate effectively in a business setting through written, verbal and electronic formats;
• Analyze the effect of globalization, and personal and cultural development on the practice of accounting;
• Prepare a set of complete financial books and supportive records utilizing critical thinking skills and appropriate software and accounting principles.

AFTER UNION COUNTY COLLEGE

This is a career program. Graduates work as junior staff accountants, bookkeepers, loan service representatives, tax preparation assistants, credit and collection associates, and junior financial analysts. While this program is designed for students who expect to work in the profession immediately after graduation, many students elect to continue their studies at a four-year college or university.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>ENG 101 English Composition I</td>
<td>3</td>
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<tr>
<td></td>
<td>MAT 119 Algebra</td>
<td>4</td>
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<tr>
<td></td>
<td>ACC 103 Accounting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 105 Organization and Management</td>
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<tr>
<td></td>
<td>CST 100 Introduction to Computer Applications</td>
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<tr>
<td>Semester Total:</td>
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<td>16</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>ENG 122 Introductory Technical and Business Writing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECO 201 Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT 127 Elementary Statistics</td>
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<tr>
<td></td>
<td>ACC 104 Accounting II</td>
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<td>Semester Total:</td>
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SECOND YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>Humanities (Must be chosen from Literature, Fine Arts, History, OR Modern Languages)</td>
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<tr>
<td></td>
<td>ACC 203 Intermediate Accounting I</td>
<td>3</td>
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<tr>
<td></td>
<td>ACC 210 Microcomputers in Accounting</td>
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<td></td>
<td>ACC 211 Federal Taxes I</td>
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<td></td>
<td>BUS 201 Business Law I</td>
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<td>Semester Total:</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>ACC 204 Intermediate Accounting II</td>
<td>3</td>
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<td></td>
<td>ACC 205 Cost Accounting</td>
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<td></td>
<td>ACC 212 Federal Taxes II</td>
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<tr>
<td></td>
<td>ACC 290 Co-op Education Experience in Accounting</td>
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<tr>
<td></td>
<td>BUS 202 Business Law II</td>
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<tr>
<td>Semester Total:</td>
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</table>

Total Program Credits: 60
Students in this second-degree program will pursue advanced credits in the chosen discipline to later be transferred towards a baccalaureate degree at a partner college or university.

After completing their first Associate degree in the chosen discipline, students will enroll in the Advanced and Continuous Studies degree. This degree will be comprised of already-earned credits for the first associate degree plus upper-level credits for the students’ fifth and sixth semesters of a 3+1 program.

Students are required to meet with an advisor prior to matriculating in this program.

Upon successful completion of all program requirements, graduates will be able to:

- Identify major concepts and current trends in the discipline;
- Discuss the ethical responsibilities in the workplace;
- Communicate effectively in writing, verbal and electronic formats;
- Employ critical thinking skills based on research and decision making appropriate to the discipline and academic level;
- Demonstrate information literacy through familiarity and the effective use of technical information resources.

**PREVIOUSLY EARNED CREDITS**

<table>
<thead>
<tr>
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<th>Cr.</th>
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<td><strong>GENERAL EDUCATION COURSES</strong></td>
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<td>20 CREDITS</td>
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<td>Communications General Education Requirement</td>
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<td>Math, Science, Technology General Education Requirement</td>
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<tr>
<td>Social Science or Humanities General Education Requirement</td>
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<tr>
<td>Unassigned General Education Requirement</td>
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<tr>
<td>Electives*</td>
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<td><strong>Total Credits</strong>:</td>
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</table>

* Credits earned previously in the first Union County College associate’s degree.

**AFTER UNION COUNTY COLLEGE**

Graduates may transfer to Berkeley College or another four-year college or university to continue the 3+1 bachelor’s degree plan.

**RECOMMENDED SEQUENCE**

**FIRST YEAR**

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
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<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
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<td>Liberal Arts Electives^* (1, 2, and 3)</td>
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<td>Electives^** (1 and 2)</td>
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<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>ENG 315 Advanced Writing for Social Sciences</td>
<td>3</td>
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<tr>
<td>Liberal Arts Electives^* (4 and 5)</td>
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<tr>
<td>Elective^** (3)</td>
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<td><strong>Total Program Credits:</strong></td>
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^* LIBERAL ARTS ELECTIVES

Liberal Arts elective courses are based on the program discipline at the four-year partner institution. Complete the Liberal Arts Electives for the chosen discipline as outlined in the above recommended semester sequence.

**CRIMINAL JUSTICE**

^*LIBERAL ARTS ELECTIVES - CRIMINAL JUSTICE

1. Math, Science, Tech Gen Ed - Requirement - 4 credit hours
2. ENG 102 - English Composition II - 3 credit hours
3. SPA 101 - Beginning Spanish I - 3 credit hours
4. English 200-Level Literature Gen Ed - 3 credit hours
5. PSY 208 - Abnormal Psychology - 3 credit hours

**BUSINESS MANAGEMENT**

^*LIBERAL ARTS ELECTIVES - BUSINESS MANAGEMENT

1. MAT 127 - Elementary Statistics - 4 credit hours
2. ENG 102 - English Composition II - 3 credit hours
3. PHI 210 - Ethics - 3 credit hours
4. English 200-Level Literature Gen Ed - 3 credit hours
5. PSY or SOC Gen Ed Requirement - 3 credit hours

^**ELECTIVES

Elective courses are based on the program discipline at the four-year partner institution. Complete the electives for the chosen discipline as outlined in the above recommended semester sequence.

**CRIMINAL JUSTICE**

^**ELECTIVES - CRIMINAL JUSTICE

1. CRJ 314 - Introduction to Intelligence - 3 credit hours
2. Free Elective - 3 credit hours
3. CRJ 315 - Terrorism and Counter-Terrorism - 3 credit hours

**BUSINESS MANAGEMENT**

^**ELECTIVES - BUSINESS MANAGEMENT

1. BUS 215 - Excel for Business - 3 credit hours
2. BUS 209 - Introduction to Global Business - 3 credit hours
3. BUS 346 - Developing Managerial Competence - 3 credit hours
The American Sign Language and Deaf Studies Degree Program is designed for individuals who do not have a college degree and are interested in the field of Deaf Studies, Linguistics, communications, psychology, social work, rehabilitation, education of the Deaf and other related areas. The program provides a multi-disciplinary and interdisciplinary approach in American Sign Language and Deaf Studies. Areas of scholarly pursuit include cultural and historical studies, linguistic examination, and literary analysis, as well as the study of the language in its conversational form. Graduates will be prepared for entry-level positions working with Deaf persons. The program can be completed either as part-time or full-time in the day or evening.

Students are admitted to the ASL and Deaf Studies Program when they have demonstrated English competency. Deaf and Hard of Hearing students are encouraged to participate in this program.

Upon successful completion of all program requirements, graduates will be able to:

• Demonstrate proficiency in the use of American Sign Language and English with members of the Deaf community, effective written, spoken, and signed communication skills;
• Demonstrate knowledge of the studies of American Sign Language as a distinct modern language;
• Employ scholarly pursuit of cultural and historical studies;
• Apply linguistics and literary analysis of American Sign Language and its discourse styles;
• Analyze the social and cultural characteristics of American Deaf Culture diverse populations within the Deaf community, mainstream American culture and diverse cultures in America;
• Explain contemporary issues within the Deaf Community;
• Demonstrate the skills and motivation for continued self-education;
• Demonstrate critical thinking and problem solving skills, with emphasis on using community resources to solve specific problems;

Conferences with respective instructor(s) are by appointment only. Information about the American Sign Language and Deaf Studies Programs may be obtained at the ASL&DS and AEIP office (Room 205, Plainfield Campus) or the Advising, Career, and Transfer Services Office at the Plainfield Campus.

AFTER UNION COUNTY COLLEGE

Graduates will be prepared for entry-level positions working with Deaf persons in a variety of social service settings and/or for transfer to four-year degree programs.
The American Sign Language and Deaf Studies Certificate of Completion Program is designed for individuals who currently have a college degree (Associate degree or higher) and are interested in the fields of Deaf Studies, linguistics, communications, psychology, social work, rehabilitation, education of the Deaf and other related areas. The program provides a multi-disciplinary and interdisciplinary approach in American Sign Language and Deaf Studies. Areas of scholarly pursuit include cultural and historical studies, linguistic examination, and literary analysis, as well as the study of the language in its conversational form. Graduates will be prepared for entry-level positions working with Deaf persons. This program can be completed either as part-time or full-time in the day or evening.

Students are admitted to the ASL and Deaf Studies Program when they have demonstrated English competency and have satisfactorily completed the two semesters of Pre-entry-level. Deaf and Hard of Hearing students are encouraged to participate in this program. Upon successful completion of all program requirements, graduates will be able to:

- Apply linguistics and literary analysis of the language and its discourse styles;
- Compare and contrast the social and cultural characteristics of American Deaf Culture, mainstream American culture and diverse cultures within America;
- Describe the psychological and social factors affecting diverse populations within the Deaf community;
- Explain contemporary issues within the Deaf Community;
- Demonstrate effective written, spoken and signed communication skills;
- Demonstrate the skills and motivation for continued self-education;
- Demonstrate critical thinking and problem solving skills, with emphasis on using community resources to solve specific problems;
- State one’s rights and responsibilities as a professional and/or a citizen in a world community.

PROGRAM REQUIREMENTS:

A grade of ‘B’ or higher in the pre-entry level is required to be eligible for entry into the ASL & Studies program. Students must maintain grades of ‘B’ or higher to stay in the program. A grade of ‘C’ necessitates a conference with the instructor(s) for consultation. A ‘C’ in more than one of the courses disqualifies the student from continuing in the program unless there were extenuating circumstances. A grade of ‘D’ or ‘F’ disqualifies the student from entry into or continuation of ASL & Deaf Studies Program. As mandated by the college, students must earn grades of ‘C’ or higher in the general education courses.

Conferences with respective instructor(s) are by appointment only. Information about the American Sign Language and Deaf Studies and Interpreters for Deaf Programs may be obtained at the ASL&DS and AEIP office (Room 3, Plainfield Campus) or the Advising Office at the Plainfield or Cranford campuses.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress. Milestone courses for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
This program is designed to prepare students who plan for a career in architecture to transfer to a baccalaureate program.

Upon successful completion of all program requirements, graduates will be able to:

- Arrange and manage a collaborative design Charrette for/with local communities;
- Compare materials and methods of building construction through analyses of basic structural principles, collection and measurement of relevant data, and evaluation of information as a member of a team;
- Demonstrate computer literacy in 3D programming and word processing, and other software applications;
- Employ critical thinking skills in science, mathematics, and the fundamentals of architecture;
- Communicate architectural information effectively in visual, written, verbal and oral formats to a diverse multicultural audience;
- Use technology and library resources to conduct research related to architecture, mathematics, engineering, sustainability, the humanities and social science.

AFTER UNION COUNTY COLLEGE

Graduates of the Architecture program who plan for a career in Architecture transfer to a baccalaureate program.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 143</td>
<td>Elementary Mathematical Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>ARC 101</td>
<td>Architectural Design I</td>
<td>5</td>
</tr>
<tr>
<td>ARC 105</td>
<td>Introduction to Architecture and Culture</td>
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Semester Total: 15

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
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<tr>
<td>MAT 144</td>
<td>Elementary Mathematical Analysis II</td>
<td>4</td>
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<td>PHY 101</td>
<td>General Physics I</td>
<td>3</td>
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<td>PHYL 111</td>
<td>Mechanics Laboratory</td>
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<tr>
<td>ARC 102</td>
<td>Architectural Design II</td>
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Semester Total: 16

SECOND YEAR

<table>
<thead>
<tr>
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<th>Course</th>
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<tbody>
<tr>
<td>FIA 108</td>
<td>Appreciation of Art</td>
<td>3</td>
</tr>
<tr>
<td>FIA 119</td>
<td>Introduction to Architectural History</td>
<td>3</td>
</tr>
<tr>
<td>MAT 185</td>
<td>Social Science Gen Ed Requirement</td>
<td>3</td>
</tr>
<tr>
<td>ARC 205</td>
<td>Architectural CAD Design</td>
<td>3</td>
</tr>
<tr>
<td>ARC 218</td>
<td>Construction Methods and Materials</td>
<td>3</td>
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Semester Total: 15

<table>
<thead>
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<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>FIA 120</td>
<td>Architectural History</td>
<td>3</td>
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<tr>
<td>ARC 206</td>
<td>Architectural 3D Design</td>
<td>3</td>
</tr>
<tr>
<td>ARC 210</td>
<td>Portfolio Development and Presentation Methods</td>
<td>2</td>
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<td></td>
<td>Humanities Gen Ed Requirement</td>
<td>3</td>
</tr>
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<td></td>
<td>Social Science or Humanities Gen Ed Requirement</td>
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</table>

Semester Total: 14

Total Program Credits: 60

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

Are you great with numbers?

Do numbers rule your universe? Turn to PAGE 110 to learn about UNION County College’s Associate in Science degree in Mathematics.
Interested in earning your degree online?

Distance learning makes the world your classroom! Earn credits from Union County College from the comfort of your own home and make progress towards your completing your degree.

Online Courses are for students who need more flexibility than your traditional classes offer. Union County College offers 14 degrees and 6 certificates fully online, allowing the opportunity to earn college degree no matter where you are or what your busy life demands.
This program is a cooperative program between Union County Vocational-Technical School and Union County College. All courses are taught by Union County College faculty. The AUT professors are ASE certified. The AUT courses will be offered only on the Scotch Plains campus of Union County College at the state-of-the-art automotive facility of the Vocational-Technical School.

The Automotive Technology Program is a competency-based course of study designed to train and prepare the serious student in eight automotive areas: A/C & Heating, Brakes, Steering & Suspension, Electrical & Electronic Repair, Engine Performance, Engine Repair, Manual Drive Trains, and Automatic Transmissions. Eligible Auto Technology students may participate in work activities such as internships, mentoring, apprenticeships and Cooperative Industrial Education.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate theoretical and practical competency in each of the ASE areas covered within the Automotive Technology Curriculum;
- Perform laboratory procedures and assess the validity of experimental/diagnostic data;
- Use automotive computer software applications to diagnose automotive problems and to generate technical service bulletins and procedures for repair of automotive problems;
- Employ critical thinking to solve automotive problems and apply automotive repair methods to satisfy business and industry standards;
- Interpret both technical and non-technical concepts orally and in written and electronic formats;
- Demonstrate information literacy through the effective use of technical literature in the areas of automotive maintenance and repair.

**AFTER UNION COUNTY COLLEGE**

Upon graduating the student will be eligible to take ASE certification exams. Union County Vocational School is an ASE certified testing center. Graduates are qualified to work in all automotive service facilities. Employment opportunities include dealerships, independent & specialty shops, chain stores, municipalities, fleet and corporate facilities as well as self employment. This AAS degree may not be transferable to a four-year institution, but many of the non-technology courses may transfer.

**RECOMMENDED SEQUENCE**

**FIRST YEAR**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>CR.</th>
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</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
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<tr>
<td>Social Science Gen Ed Requirement</td>
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<tr>
<td>MAT 113</td>
<td>Math Applications</td>
<td>3</td>
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<tr>
<td>AUT 100</td>
<td>Automotive Fundamentals</td>
<td>4</td>
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<tr>
<td>AUT 101</td>
<td>Steering/Suspension Systems</td>
<td>4</td>
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<tr>
<td>Semester Total:</td>
<td></td>
<td>17</td>
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<tr>
<td>SPRING SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 122</td>
<td>Introductory Technical and Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
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<tr>
<td>AUT 103</td>
<td>Brake Systems</td>
<td>4</td>
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<tr>
<td>AUT 121</td>
<td>Automotive Electrical 1</td>
<td>4</td>
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<td>Semester Total:</td>
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</table>

**SECOND YEAR**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>CR.</th>
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</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
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</tr>
<tr>
<td>Humanities Gen Ed Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AUT 122</td>
<td>Automotive A/C &amp; Heating</td>
<td>4</td>
</tr>
<tr>
<td>AUT 131</td>
<td>Automotive Engine Performance 1</td>
<td>4</td>
</tr>
<tr>
<td>AUT 201</td>
<td>Engine Repair</td>
<td>4</td>
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<tr>
<td>Semester Total:</td>
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<tr>
<td>SPRING SEMESTER</td>
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<tr>
<td>AUT 202</td>
<td>Automotive Electrical 2</td>
<td>4</td>
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<tr>
<td>AUT 204</td>
<td>Automotive Drivetrains</td>
<td>4</td>
</tr>
<tr>
<td>AUT 232</td>
<td>Automotive Engine Performance 2</td>
<td>3</td>
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<tr>
<td>Gen Ed Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Semester Total:</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Total Program Credits: 60
Biology is a natural science that studies life and living organisms. This Associate of Science in Biology program at Union County College, which includes courses in biology, chemistry, mathematics, and liberal arts, is designed for transfer to a bachelor’s program in biology or another closely related discipline. The biology program includes opportunities to engage in undergraduate research and to publish in academic journals. These experiences provide students with training in the scientific method and an introduction to research techniques, preparing them for transfer to competitive schools in the tri-state and across the country.

The College has articulation agreements with four-year colleges in New Jersey and beyond. Students should work with a transfer advisor for more information.

The program assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the Advanced Algebra & Functions exam. All students enrolled in the Biology program are encouraged to take the Advanced Algebra & Functions exam to determine advanced mathematics placement. Test scores will determine the sequence of mathematics courses required.

Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:

- Communicate the terminology, concepts, and principles of biology effectively in written, verbal, and electronic formats;
- Analyze biological data;
- Evaluate the impact of humans and technology on the natural world, including ethical implications;
- Utilize critical thinking skills to understand and solve biological problems, differentiating scientific fact from opinion;
- Explain the scientific method, including the reasoning process inherent in scientific inquiry, and the dynamic nature of scientific knowledge;
- Demonstrate competency in utilizing information technology to expand their current and future knowledge.

<table>
<thead>
<tr>
<th>COURSE#</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 143</td>
<td>Elementary Mathematical Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td>MAT 171 Unified Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 111</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 111</td>
<td>General Chemistry I</td>
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Semester Total: 15

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 144</td>
<td>Elementary Mathematical Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td>MAT 172 Unified Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHE 112</td>
<td>General Chemistry II</td>
<td>4</td>
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</tbody>
</table>

Semester Total: 15

Students must complete all developmental English courses before taking any credit level Biology course.

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

AFTER UNION COUNTY COLLEGE

Graduates can take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.
This program is developed for students who wish to acquire an interdisciplinary education in business management and blockchain technology. Students will combine these skills in preparation for business careers in first line and or mid-management positions, with a broad background in the mechanics of blockchain technology and the problems it aims to solve in the business industry. This program explores various areas of business, including supply chain, finance, healthcare and real estate, and business functions where blockchain skills are in high demand.

Upon successful completion of all program requirements, graduates will be able to:

- Communicate effectively in written, verbal, and electronic formats;
- Discuss past and current management theories, and principles;
- Describe the psychological and sociological theories that support the management practice of employee motivation to accomplish organizational objectives;
- Identify the challenges facing managers and their decision to use blockchain technology in a changing domestic and global business environment;
- Outline the principles, limitations, and opportunities offered by blockchain technology.

AFTER UNION COUNTY COLLEGE

This career program is designed for the student to enter the profession upon graduation. Graduates may work in one of many areas such as, supply chain, finance, and healthcare. Many students elect to continue their studies at four-year colleges or universities.
This certificate of achievement program is for students who wish to acquire an interdisciplinary education in blockchain technology and business. Students will combine these skills in preparation for a business career of their choice. A certificate of achievement in blockchain technology provides students with a solid education in the mechanics of blockchain protocols, and the problems blockchain technologies aim to solve in the business industry. Students will explore various areas of business, including supply chain, finance, health care, real estate, and all business functions where blockchain skills are in high demand.

Upon successful completion of all program requirements, graduates will be able to:

- Communicate effectively in written, verbal, and electronic formats about blockchain technology in a business setting;
- Discuss past and current management theories, principles, and application of blockchain technology;
- Describe the psychological and sociological theories that support the management practice of employee motivation and blockchain technology to accomplish organizational objectives;
- Identify the challenges facing managers using blockchain technology in a changing domestic and global business environment;
- Outline the principles governing ethical behavior using blockchain technology.

AFTER UNION COUNTY COLLEGE

Upon completion of this certificate the student may apply these credits toward the Blockchain Technology, A.A.S. degree or enter the workforce.

**RECOMMENDED SEQUENCE**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
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<tr>
<td>MAT 127</td>
<td>Elementary Statistics</td>
<td>4</td>
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<tr>
<td>BLC 171</td>
<td>Blockchain Fundamentals</td>
<td>3</td>
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<tr>
<td>BLC 232</td>
<td>Blockchain Technologies</td>
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<tr>
<td>BLC 270</td>
<td>Blockchain Decision Making</td>
<td>3</td>
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<tr>
<td>SCM 101</td>
<td>Introduction to Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>Semester Total:</td>
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</tr>
<tr>
<td>Total Program Credits:</td>
<td>16</td>
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</table>
The Associate in Arts Degree in Business prepares students for a career in business or for advanced study at a four-year institution. The College has many articulation agreements with four-year colleges designed to facilitate transfer to these institutions. For further information, please see the Transfer Advisor. The degree requirements consist of general education requirements and electives in preparation for a major area of study.

Upon successful completion of all program requirements, graduates will be able to:

- Describe the practice and principles of a mixed economy-based market business;
- Apply the principles governing ethical behavior in business;
- Communicate effectively in written, verbal, and electronic formats in a business environment;
- Utilize technology as it applies to business practices and research;
- Develop and maintain an accounting system and analyze statistical data.

### FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE#</th>
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<th>CR.</th>
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<tbody>
<tr>
<td></td>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
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<tr>
<td>History Gen Ed Requirement</td>
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<tr>
<td>MAT 119</td>
<td>Algebra</td>
<td>4</td>
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<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
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<td>BUS 101</td>
<td>Introduction to Contemporary Business</td>
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<tr>
<td>OR</td>
<td>BUS 105 Organization and Management</td>
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<td></td>
<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Gen Ed Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History Gen Ed Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science Gen Ed Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MAT 143</td>
<td>Elementary Mathematical Analysis I or Higher Level Math</td>
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<td><strong>Semester Total:</strong></td>
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### SECOND YEAR

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<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td></td>
<td>Humanities Gen Ed Requirement</td>
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<tr>
<td>Social Science Gen Ed Requirement</td>
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<tr>
<td>Lab Science Gen Ed Requirement</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ACC 103</td>
<td>Accounting I</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Semester Total:</strong></td>
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<tr>
<td></td>
<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>BUS 201</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 104</td>
<td>Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 128</td>
<td>The Dynamics of Communication OR</td>
<td>3</td>
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<td></td>
<td><strong>Semester Total:</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Total Program Credits:</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

NOTE: Students are encouraged to contact the specific transfer institution when choosing general education electives.
Congratulations to our 2019
Women’s Basketball Team
NJCAA Division II National Runner Up
NJCAA District N Champions
NJCAA Region XIX Champions
Garden State Athletic Conference Champions!
unionowls.com
The Business Fundamentals Certificate of Achievement program upgrades a student’s skills necessary for success in the ever-changing office. The program provides a strong background in technology courses using up-to-date software.

Upon successful completion of all program requirements, graduates will be able to:

- Apply critical thinking and problem-solving skills to the fundamentals of business;
- Communicate professionally and effectively using E-mail and the Internet in a business setting;
- Use beginning and advanced features of MS Excel and additional application packages.

AFTER UNION COUNTY COLLEGE

Upon completion of this certificate students may enter the workforce or transfer their credits to a related degree program.

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
**BUSINESS MANAGEMENT**

**ASSOCIATE IN APPLIED SCIENCE DEGREE**

This program is developed for the student who wishes to acquire additional management skills and is planning a program in preparation for a business career of his/her choice. Flexibility in course selection enables the student to achieve his/her specific educational, career and personal goals. The Business Management program has been designed as a career program in preparing students for first line and/or mid-management positions.

Upon successful completion of all program requirements, graduates will be able to:

- Describe past and current management theories and principles and application;
- Describe the challenges facing management in a changing domestic and global business environment;
- Outline the principles governing ethical behavior in business;
- Communicate effectively in written, verbal, and electronic formats in a business environment;
- Apply critical thinking, decision making skills, strategic planning, and problem-solving skills in the field of business management;
- Describe the psychological and sociological theories that support the management practice of employee motivation, morale and team building to accomplish organizational objectives.

**AFTER UNION COUNTY COLLEGE**

This career program is designed for the student to enter the profession upon graduation. Graduates may work as managers, shift supervisors, management analysts and assistant managers of retail stores. Many students elect to continue their studies at four-year colleges or universities.

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**MILESTONES**

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

**Career and Transfer Information**

www.ucc.edu/academicmaps

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**RECOMMENDED SEQUENCE**

**FIRST YEAR**

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 113</td>
<td>Math Applications or higher level math</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
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</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>ACC 103</td>
<td>Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 101</td>
<td>Introduction to Contemporary Business</td>
<td>3</td>
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</tbody>
</table>

**Semester Total:** 15

**SPRING SEMESTER**

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
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<tbody>
<tr>
<td>ENG 128</td>
<td>The Dynamics of Communication</td>
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<td>OR</td>
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</tr>
<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>ENG 102</td>
<td>English Composition</td>
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<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
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<tr>
<td>Gen Ed Requirement</td>
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<td>ACC 104</td>
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<tr>
<td>BUS 105</td>
<td>Organization and Management</td>
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**Semester Total:** 15

**Second Year**

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<thead>
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<tr>
<td>ECO 201</td>
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<tr>
<td>BUS 107</td>
<td>Human Resources Management</td>
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<tr>
<td>BUS 115</td>
<td>Personal Finance</td>
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<td>BUS 201</td>
<td>Business Law I</td>
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<tr>
<td>BUS 200</td>
<td>Small Business Management</td>
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</table>

**Semester Total:** 15

**Total Program Credits:** 60
The Marketing Program prepares students with a fundamental knowledge of business procedures with an emphasis on a specialization in Marketing. Additionally, the program contains a substantial general education component to provide students with a more complete educational background. Although this program is not designed to be a transfer program, many of the courses would be acceptable for transfer. Upon completion of this program, students will be qualified for entry-level positions in advertising, marketing, public relations, and retailing and sales. Individuals currently employed in the Marketing area may wish to sharpen their skills by enrolling in certain courses or the entire program.

Upon successful completion of all program requirements, graduates will be able to:

- Describe the general environmental factors that impact local, national, and global trade;
- Outline the principles governing the ethical practices of the marketing industry;
- Discuss the sociological and psychological principles that apply when studying and managing the behaviors of customers and consumers;
- Communicate effectively in written, verbal, and electronic formats in a business environment;
- Apply critical thinking, decision making skills, strategic planning, and problem-solving skills in the field of business marketing;
- Demonstrate an ability to do product planning, distribution, pricing, and promotion in support of a specified marketing initiative.

**AFTER UNION COUNTY COLLEGE**

This career program is designed for the student to enter the profession upon graduation. Graduates are qualified to enter entry-level positions in Advertising, Marketing, Public Relations, and Retailing and Sales. Many students elect to continue their studies at four-year colleges or universities.

**RECOMMENDED SEQUENCE**

### FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>ENG 101  English Composition I</td>
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<tr>
<td></td>
<td>ENG 129  Public Speaking</td>
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<tr>
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<td>PSY 101  General Psychology</td>
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<td>MAT 113  Math Applications</td>
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<td>BUS 101  Introduction to Contemporary Business</td>
<td>3</td>
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<tr>
<td>Semester Total:</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>ENG 102  English Composition II</td>
<td>3</td>
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<tr>
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<td>SOC 101  Principles of Sociology</td>
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<td></td>
<td>BUS 105  Organization and Management</td>
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<td></td>
<td>BUS 110  Business and Technology</td>
<td>3</td>
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<tr>
<td></td>
<td>BUS 208  Principles of Marketing</td>
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<td>Semester Total:</td>
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### SECOND YEAR

<table>
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<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>ECO 201  Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CST 100  Introduction to Computer Applications*</td>
<td>3</td>
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<tr>
<td></td>
<td>ACC 103  Accounting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 201  Business Law I</td>
<td>3</td>
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<tr>
<td></td>
<td>BUS 203  Principles of Advertising</td>
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<td>Semester Total:</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>ACC 104  Accounting II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 202  Business Law II</td>
<td>3</td>
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<td>BUS 210  Marketing and the Global Environment</td>
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<td>Humanities Gen Ed Requirement</td>
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<td>ECO 202  Principles of Economics II</td>
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<tr>
<td>Semester Total:</td>
<td></td>
<td>15</td>
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</tbody>
</table>

Total Program Credits: 60
The CAD-CAM Certificate of Achievement is designed to provide the academic, technical and hands-on experience to prepare students for entry into the workforce in engineering drawing and drafting, materials testing, and Computer Numerical Control (CNC) machine programming or operation. In addition, students can seek further on the job-training in mechanical engineering technology industry related jobs.

This program will allow students to gain exposure to the design, development, testing, and manufacture of industrial machinery, consumer products, and other equipment.

Students will make drawings and layouts, generate CNC codes from 3D simulation, operate a CNC machine, record and analyze data, make calculations and estimates, and report their findings.

The CAD-CAM Certificate of Achievement contributes to further academic growth beyond the Certificate of Achievement level by providing 12 credits of transfer toward an AAS degree in Mechanical Engineering Technology.

Upon successful completion of all program requirements, graduates will be able to:

- Employ critical thinking and problem solving skills to solve technical problems in general and to make drawings according to standards;
- Demonstrate knowledge of the technical terms and principles of mechanical engineering technology and design;
- Express and interpret both technical and non-technical concepts orally and in written and electronic formats;
- Demonstrate information literacy through familiarity and the effective use of technical information resources in the field of mechanical engineering technology and design.

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- Demonstrate information literacy through familiarity and the effective use of technical information resources in the field of mechanical engineering technology and design.

**AFTER UNION COUNTY COLLEGE**

Graduates can enter the workforce in engineering drawing, drafting materials testing, or Computer Numerical Control (CNC) machine programming or operation. Graduates can also seek further academic growth by transferring their 12 credits from this Certificate of Achievement toward an A.A.S. degree in Mechanical Engineering Technology.
CHEMISTRY
ASSOCIATE IN SCIENCE DEGREE

This is a degree program that combines chemistry courses with additional course work in biology, mathematics, physics, and the liberal arts. The degree program prepares students primarily for advanced study at a four-year institution.

Candidates for the program should present two years of algebra, one year each of geometry, chemistry, physics, and trigonometry, as high school entrance credits. High school biology is also strongly recommended.

This program assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

All students enrolled in the Chemistry Program are recommended to take the College Level Mathematics exam to determine advanced mathematics placement if needed. Test scores will determine the sequence of mathematics courses required.

Consultation with the STEM Division is strongly advised.

Upon successful completion of all program requirements, graduates will be able to:

- Evaluate how chemical theories explain the natural world;
- Identify and analyze a chemical problem in terms of its significant components and the information needed to solve it;
- Correlate theory and practice in the chemical sciences;
- Perform laboratory experiments and measurements that include graphing and analyzing data;
- Research, assess and effectively communicate chemical information in written, verbal, and electronic formats.

AFTER UNION COUNTY COLLEGE
Graduates can take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
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<th>Cr.</th>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
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<tr>
<td>Humanities Gen Ed Requirement</td>
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<tr>
<td>MAT 171</td>
<td>Unified Calculus I*</td>
<td>4</td>
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<tr>
<td>CHE 111</td>
<td>General Chemistry I</td>
<td>4</td>
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<tr>
<td>Semester Total:</td>
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<td>SPRING SEMESTER</td>
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<td>ENG 102</td>
<td>English Composition II</td>
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<td>MAT 172</td>
<td>Unified Calculus II</td>
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<tr>
<td>CHE 112</td>
<td>General Chemistry II</td>
<td>4</td>
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<tr>
<td>BIO 111</td>
<td>General Biology I**</td>
<td>4</td>
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<td>OR</td>
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<tr>
<td>PHY 111</td>
<td>Mechanics</td>
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<td>AND</td>
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<tr>
<td>PHYL 111</td>
<td>Mechanics Laboratory</td>
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<tr>
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SECOND YEAR

<table>
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<tr>
<td>FALL SEMESTER</td>
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</tr>
<tr>
<td>ENG 128</td>
<td>The Dynamics of Communication</td>
<td>3</td>
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<tr>
<td>OR</td>
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<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MAT 271</td>
<td>Unified Calculus III</td>
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</tr>
<tr>
<td>CHE 211</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General Biology II**</td>
<td>4</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>PHY 201</td>
<td>Electricity and Magnetism</td>
<td>3</td>
</tr>
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<td>AND</td>
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<td>PHYL 201</td>
<td>Electricity and Magnetism Laboratory</td>
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<tr>
<td>CHE 212</td>
<td>Organic Chemistry II</td>
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<td>CST 161</td>
<td>Computer Programming Fundamentals</td>
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<td>Humanities Gen Ed Requirement</td>
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<td>Social Science Gen Ed Requirement</td>
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<tr>
<td>Semester Total:</td>
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</tbody>
</table>

Total Program Credits: 60

* The stated sequence of courses for the Chemistry program assumes that the student is math-ready for calculus.
** BIO 111 & BIO 112 are recommended for students interested in medicine, pharmacy, biochemistry and related science fields. Please consult with the STEM Division and/or advisor from your potential transfer institution.
The Communications curriculum is designed for transfer to a bachelor’s program in communications or a related discipline. Options in Journalism and Public Relations or Media are available for students who have decided that they are particularly interested in a certain field. This program is designed for students who are undecided regarding specialization and who are interested in the fields of education, law, or mass communications. Students may consult with the Division Dean’s office regarding appropriate option and course selections for their specific needs and interests.

Upon successful completion of all program requirements, graduates will be able to:

- Discuss current social and political issues and events, both orally and in writing;
- Compare and contrast, both orally and in writing, prevalent cultural narratives and texts and the various media used to convey them;
- Demonstrate proficiency with current productivity software and apply the software to the diverse field of communications;
- Analyze, both orally and in writing, the ability to utilize various communication skills in order to present an individual point of view to others in a clear manner using verbal, written and visual techniques;
- Apply the necessary skills to research the historical aspects of current events and the cultural impact of such events.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

AFTER UNION COUNTY COLLEGE

Graduates can prepare to transfer into a four-year college or university Communications program and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.
Information systems (IS) technology changes are occurring across the US and the world. With these advances have also come changes in the ways that information can be accessed and shared. These have precipitated the need for well-educated IS professionals. This curriculum has been designed to meet the needs of current IS professionals as well as to prepare future IS professionals.

Information Systems positions are becoming more diversified. Students who complete the curriculum will have a strong foundation in interpersonal and communication skills, problem-solving skills, critical thinking skills, and ethics.

Upon successful completion of all program requirements, graduates will be able to:

- Create an efficient normalized database and manipulate it using structured query language given a set of specifications;
- Identify and analyze user needs and take them into account in the selection, creation, evaluation, documentation, and administration of computer-based systems;
- Utilize critical thinking and current technology to effectively integrate IT-based solutions into the user environment;
- Discuss the ethical and social responsibilities necessary for IT businesses and organizations;
- Use written, oral, and electronic formats to effectively and professionally communicate to diverse multicultural audiences within a business environment.

AFTER UNION COUNTY COLLEGE

Graduates will work as an Information System professional in a variety of settings or transfer to a four-year degree program.
The Computer Science transfer degree program is designed for students who intend to continue their studies at a four-year college or university. This curriculum builds a solid theoretical and mathematical foundation needed to pursue advanced studies in computer science. Students will explore secure coding, testing and validation, computer architecture, operating systems, computational methods, analysis of algorithms, and the development of data structures. This course of study is supported by relevant mathematics, science, and general education courses. Computer scientists are problem solvers and need strong critical thinking skills to a variety of challenging problems and domains.

Upon successful completion of all program requirements, graduates will be able to:

- Use current techniques, skills, and tools with computer programming languages to solve real-world problems;
- Discuss the ethical and societal ramifications of software applications and computing technology;
- Design, implement, test, and evaluate complete, logical programs with documentation that meets defined specifications;
- Use written, oral, and electronic formats to effectively and professionally communicate to diverse audiences within an organization;
- Use software methods and algorithmic thinking to design technological solutions for a variety of different fields.

**AFTER UNION COUNTY COLLEGE**

Graduates of this program can be employed as entry-level computer programmers, engineering assistants, computer operators, or may continue their education in the computer field at a four-year degree-granting institution.

### RECOMMENDED SEQUENCE

**FIRST YEAR**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
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<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
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<tr>
<td>Social Science Gen Ed Requirement</td>
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<tr>
<td>MAT 171</td>
<td>Unified Calculus I*</td>
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<td>CST 161</td>
<td>Computer Programming Fundamentals</td>
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<td>PHY 111</td>
<td>Mechanics</td>
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<td>PHYL 111</td>
<td>Mechanics Laboratory</td>
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<td>CST 162</td>
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**SECOND YEAR**

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<tr>
<td>Humanities Gen Ed Requirement</td>
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<tr>
<td>MAT 267</td>
<td>Discrete Mathematics</td>
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<tr>
<td>CST 261</td>
<td>Data Structures</td>
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<tr>
<td>CST 226</td>
<td>Introduction to Operating Systems</td>
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<tr>
<td>CST 202</td>
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<tr>
<td><strong>Total Program Credits:</strong></td>
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</table>

* The stated sequence of courses for the Computer Science program assumes that the student is math-ready for calculus.

** Any CST course except CST 100.

The following list is recommended:

- CST 122 Web Application Development
- CST 135 Linux Fundamentals
- CST 175 Networking Fundamentals
- CST 204 Database Management
- CST 210 Principles of Cybersecurity
- CST 212 Programming for Mobile Devices
- CST 215 Cyber Law and Ethics

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Programs of Study

(908)709-7000  Union County College 2021-2022 catalog 75
The Computer Science Option offers the first two years of a computer science curriculum and prepares graduates for successful transfer to bachelor's degree programs at leading engineering colleges throughout the country. Computer science, as an option in the Engineering program, studies theoretical and practical problems of system implementation involving both software and hardware. The program prepares the student for a career in the design and development of computer systems. Baccalaureate degree graduates understand hardware and software and can engineer computer systems for a variety of customer applications.

Union County College has dual admission agreements with New Jersey Institute of Technology and Rutgers University. These allow Union County College graduates to transfer with junior status without going through a second admission process. Union County College also has formal transfer agreements with many other colleges. The stated sequence of courses for the Computer Science/Engineering Option assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:
- Apply knowledge of computer system components, organizations, and software operating systems to evaluate computer applications;
- Apply knowledge of computer algorithms, data structures, assembly language, and programming and data processing skills to analyze computer applications;
- Analyze and assess the validity of experimental data;
- Analyze problems of a technical nature and evaluate the merits of alternative proposals in the design of computer based solutions;
- Express and interpret both technical and non-technical concepts orally, in writing, and in electronic formats;
- Demonstrate information literacy through familiarity and the effective use of related information resources.

AFTER UNION COUNTY COLLEGE
Graduates will be prepared for careers in the design and development of computer systems. Graduates may also transfer to a four-year institution.

RECOMMENDED SEQUENCE

### FIRST YEAR

<table>
<thead>
<tr>
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<th>COURSE</th>
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</tr>
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<tbody>
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<td>General Chemistry I</td>
<td>4</td>
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<tr>
<td>EGG 101</td>
<td>Introduction to Engineering: Mathematics and Applications</td>
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<tr>
<td>ENG 102</td>
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<td>MAT 172</td>
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<tr>
<td>PHY 111</td>
<td>Mechanics</td>
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<td>PHYL 111</td>
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<td>CST 161</td>
<td>Computer Programming Fundamentals</td>
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### SECOND YEAR

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<td>PHY 201</td>
<td>Electricity and Magnetism</td>
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<td>EGG 111</td>
<td>Engineering &amp; Computer Graphics</td>
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<td>SPRING SEMESTER</td>
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<tr>
<td>CST 222</td>
<td>Computer Organization, Architecture, and Assembly Language</td>
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</table>

Total Program Credits: 60

* The stated sequence of courses for the Computer Science/Engineering Option assumes that the student is math-ready for calculus.
The Criminal Justice Program is designed to develop law enforcement professionals, other criminal justice personnel and others who, after completion of the two-year program, will be prepared to continue their studies in fields such as police administration, public administration, legal studies, and management.

Upon successful completion of all program requirements, graduates will be able to:

- Discuss the field of criminal justice including police organization, administration and management systems;
- Demonstrate basic forensic procedures;
- State their ethical responsibilities for the field of criminal justice and for their role as an officer of the law;
- Communicate effectively in writing, verbal and electronic formats with particular emphasis on police reports;
- Apply problem solving skills to specific criminal justice situations;
- Discuss the social and psychological characteristics of offenders.

AFTER UNION COUNTY COLLEGE

Graduates can continue their studies in fields such as police administration, public administration, legal studies, and management at a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.
Programs of Study

CRIMINAL JUSTICE

CERTIFICATE

The Criminal Justice certificate program is designed to enhance the credentials of students attempting to enter the profession who are interested in fields of police, corrections, probation, parole, and juvenile justice.

Upon successful completion of all program requirements, graduates will be able to:

- Discuss the field of criminal justice including police organization, administration and management;
- Discuss the rights and responsibilities of an officer of the law;
- State the procedures involved in criminal investigation and how they are applied;
- Communicate effectively in writing, verbal and electronic formats with particular emphasis on police reports.

AFTER UNION COUNTY COLLEGE

Graduates can work in the field of criminal justice or can further their education in the field.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
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<tr>
<td>ENG 101</td>
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<td>CRJ 101</td>
<td>Introduction to Criminal Justice</td>
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<tr>
<td>CRJ 201</td>
<td>Police Management Systems</td>
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<td>CRJ 203</td>
<td>Criminal Investigation</td>
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<td>MAT 125</td>
<td>Survey of Special Topics in Mathematics</td>
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<td>OR</td>
<td>Elementary Statistics</td>
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<td>OR</td>
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<td>OR</td>
<td>CST 100 Introduction to Computer Applications</td>
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<td>CRJ 102</td>
<td>Police Organization and Administration</td>
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<td>CRJ 205</td>
<td>Police Role in the Community</td>
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<td>CRJ 206</td>
<td>Criminal Law</td>
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<tr>
<td>OR</td>
<td>CRJ 208 Community Supervision of the Offender</td>
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<td>CRJ 223</td>
<td>Homeland Security</td>
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Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
The Cyber Forensics degree program prepares students with competencies in the collection, preservation and analysis of digital evidence for presentation in criminal or civil court. Effective oral, written, and visual communication of scientific, analytical, and technical information are emphasized throughout the digital forensics courses. This career-oriented program provides students with the skills required to uncover relevant information discoverable through scientific and forensic analysis of various types of digital evidence.

Students also study national and international laws applicable to cyber investigations, cyber crimes, intellectual property, and digital privacy. Using professional, court-approved investigative software in a dedicated computer classroom, students gain valuable hands-on experience with proper procedures for gathering electronic evidence while maintaining the legal chain of custody. An emphasis is placed upon professional codes of ethical conduct required for careers in cyber forensics.

**Upon successful completion of all program requirements, graduates will be able to:**

- Conduct a digital forensics investigation that conforms to accepted professional standards and are based on the investigative process;
- Examine professional and ethical codes of conduct with respect to cyber forensics;
- Effectively communicate the results of a cyber forensic analysis verbally, electronically, visually, in writing, and in presentations to both technical and lay audiences;
- Investigate potential security breaches of computer data that suggest violations of legal, ethical, policy or societal standards;
- Critically evaluate relevant technical and legal information and emerging industry trends.

**AFTER UNION COUNTY COLLEGE**

Graduates will be prepared to enter the workforce and apply for middle-skill career positions in the field of cyber forensics.

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**RECOMMENDED SEQUENCE**

**FIRST YEAR**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
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<td>CST 135</td>
<td>Linux Fundamentals</td>
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<td>CST 170</td>
<td>Digital Forensics Essentials</td>
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<td>Lab Science Gen. Ed. Requirement</td>
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<td>CST 230</td>
<td>Windows Administration and Security</td>
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**SECOND YEAR**

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<td>GOV 201</td>
<td>American Government and Politics</td>
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<td>CST 161</td>
<td>Computer Programming Fundamentals</td>
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<td>CST 175</td>
<td>Networking Fundamentals</td>
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<tr>
<td>CRJ 101</td>
<td>Introduction to Criminal Justice</td>
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<td>CST 215</td>
<td>Cyber Law and Ethics</td>
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<td>CST 240</td>
<td>Network Forensics and Incident Response</td>
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<td>OR</td>
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<td>CST 245</td>
<td>Cloud and Personal Device Forensics</td>
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<td>CST 285</td>
<td>Cyber Forensics Capstone</td>
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<td>SOC 101</td>
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</table>

* Any CST course except CST 100 or CST 111.

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Do you need a quicker way to your career?

Consider a Certificate program. From Criminal Justice to Photovoltaic studies, Certificate programs require fewer credit hours, and some can be completed in only two semesters!
The demand for college graduates with analytical thinking and problem-solving skills is increasing. To point, in the U.S. there is a severe and urgent workforce shortage in cybersecurity. Cybersecurity jobs are in high demand and the need for more security professionals is escalating. According to the U.S. Bureau of Labor Statistics, the rate of growth for jobs in cybersecurity is projected at 37% through 2022, which is much faster than the average for all other occupations.

This transfer degree option provides a solid subject matter foundation in both mathematics and computer science for students pursuing their studies in the applied field of Cybersecurity. Mathematics and computer science positions are already in high demand, and including cybersecurity knowledge makes these jobs even more critical and desirable. Union County College graduates will have the opportunity to matriculate at four-year colleges and universities, pursuing a baccalaureate degree in Computer Science.

This program option assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate critical thinking, analytical reasoning, and problem-solving skills;
- Effectively communicate technical and non-technical information in oral, written, graphic, and electronic formats;
- Apply mathematical theorems to solve a variety of classical problems;
- Formulate solutions to cybersecurity problems using algorithmic and mathematical methods;
- Discuss the legal, ethical, and societal issues in the field of cybersecurity;
- Demonstrate information literacy through the effective use of cybersecurity and mathematical resources.

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a four-year college or university as a junior with a solid subject matter foundation to pursue a baccalaureate degree in Mathematics Education and Mathematics Teaching Certification. Consult with the STEM Division for details.

RECOMMENDED SEQUENCE

FIRST YEAR

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<tr>
<th>COURSE#</th>
<th>COURSE</th>
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<td>MAT 171</td>
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<td>PHY 101</td>
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<td>PHYL 111</td>
<td>Mechanics Laboratory*</td>
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<tr>
<td>CST 161</td>
<td>Computer Programming Fundamentals</td>
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Semester Total: 15

SPRING SEMESTER

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<tr>
<td>MAT 172</td>
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<tr>
<td>PHY 102</td>
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<td>CST 162</td>
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Semester Total: 15

SECOND YEAR

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<td>CST</td>
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<td>HIS 101</td>
<td>Introduction to Western Civilization I</td>
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<td>MAT 267</td>
<td>Discrete Mathematics</td>
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<tr>
<td>MAT 248</td>
<td>Probability and Statistics</td>
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Semester Total: 15

Total Program Credits: 60

* The stated sequence of courses for the Cybersecurity program assumes that the student is math-ready for calculus.

** Students may substitute PHY 111 and PHY 201 if their transfer institution requires calculus-based physics courses. Please consult with the office of the Dean of STEM.

*** Any CST course except CST 100.
This degree option will provide a solid foundation in applying engineering technology for drones. Students will learn how to design and build a working Drone with fundamentals in artificial intelligence. Students will also be able to expand on their design skills for implementation of Internet of Things ecosystems and cross platform applications.

Upon successful completion, graduates will be able to:

- Demonstrate FAA Part 107 literacy and obtain certification as a Drone Remote Pilot In Command (PIC);
- Develop and execute implementation strategies for solving industry needs using Drones and Applications leveraging Drones;
- Perform laboratory procedures and assess the validity of experimental/diagnostic data;
- Employ critical thinking to solve technical problems in general and apply engineering technology problem solving methods based on business and industry standards;
- Express and interpret both technical and non-technical concepts orally, in writing, and in electronic formats.

After Union County College

Graduates have the option of entering a Bachelor of Science in Technology program or accepting positions such as remote drone pilots, entry-level analysts for drone platforms, quality control technicians for drone manufacturing, or personnel in drone maintenance and repair.

Recommended Sequence

**First Year**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
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<tbody>
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<tr>
<td>ENG 101</td>
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<td>MAT 171</td>
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<td>MET 109</td>
<td>Computer-Aided Drafting</td>
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<tr>
<td>EET 101</td>
<td>Principles of DC Circuits</td>
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<tr>
<td>UAS 105</td>
<td>Remote Pilot Operations</td>
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<td>Math Gen Ed Requirement**</td>
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<td>MET 112</td>
<td>Mechanics-Static</td>
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<td>EET 111</td>
<td>Digital Computer Fundamentals</td>
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<td>EET 112</td>
<td>(UAS 112) Sensors for Drones</td>
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**Second Year**

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<td>CST 115</td>
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<td>(UAS 209) Drone Control Systems</td>
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<td>EET 285</td>
<td>(UAS 285) Drone Design Capstone</td>
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<tr>
<td>EET 212</td>
<td>(UAS 212) IoT Applications for Drones</td>
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<td>PHY 102</td>
<td>General Physics II AND</td>
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<td>PHYHL 102</td>
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<td>ECO 201</td>
<td>Principles of Economics I</td>
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</table>

Total Program Credits: 60

*The stated sequence of courses for the Engineering Technology program assumes that the student is math-ready for calculus.

** Students are strongly encouraged to take MAT 172 as the Math Gen Ed Requirement.

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.
For students who wish to prepare themselves for an Associate degree or wish to transfer and earn a baccalaureate degree in Early Childhood Education or Elementary Education.

Upon successful completion of all program requirements, graduates will be able to:

1. Apply knowledge of psychological concepts to the learning behavior of children from Pre-K to Grade 3;
2. Analyze the characteristics of effective teaching behaviors and “best practices” in the teaching profession;
3. Describe the organization and funding of school systems;
4. Describe the roles of teachers, students, parents, administrators, and teacher associations in the U.S.;
5. Communicate effectively orally and in writing;
6. Demonstrate the skills and motivation for continued self-education;
7. Demonstrate the ability to access and utilize various sources of information such as the library and the internet;
8. Develop skill in quantitative and scientific reasoning.

AFTER UNION COUNTY COLLEGE

Graduates of this program will transfer to a four-year college or university for a baccalaureate degree to work with students in early childhood education.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
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<tr>
<td>FALL SEMESTER</td>
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<td>PSY 101</td>
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SPRING SEMESTER

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<tbody>
<tr>
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<tr>
<td>EDU 205</td>
<td>Educational Psychology</td>
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SECOND YEAR

<table>
<thead>
<tr>
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<tr>
<td>FALL SEMESTER</td>
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<tr>
<td>ENG 128</td>
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<td>3</td>
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<td>OR</td>
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<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
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<td>PSY 205</td>
<td>Child Psychology</td>
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<td>Lab Science Gen Ed Requirement</td>
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<td>CST 111</td>
<td>Integrating Technology in the Curriculum</td>
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SPRING SEMESTER

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<thead>
<tr>
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<tr>
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<tr>
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</tbody>
</table>

Total Program Credits: 60
For students who wish to prepare themselves for an Associate degree or wish to transfer and earn a baccalaureate degree in Education.

Upon successful completion of all program requirements, graduates will be able to:

- Apply knowledge of psychological concepts to the learning behavior of children and adolescents;
- Analyze the characteristics of effective teaching behaviors and “best practices” in the teaching profession;
- Describe the organization and funding of school systems;
- Describe the roles of teachers, students, parents, administrators, and teacher associations in the U.S.;
- Demonstrate the skills and motivation for continued self-education;
- Communicate effectively in written, verbal, and electronic formats;
- Demonstrate information literacy through familiarity and the effective use of technical literature in the areas of early childhood elementary education;
- Develop skills in quantitative and scientific reasoning.

**AFTER UNION COUNTY COLLEGE**

Graduates of this program will transfer to a four-year college or university for a baccalaureate degree to work with students in grades 4-12.

**RECOMMENDED SEQUENCE**

**FIRST YEAR**

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<tr>
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<td>FALL SEMESTER</td>
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<td>History Gen Ed Requirement</td>
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<td>EDU 205 Educational Psychology</td>
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**SECOND YEAR**

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<tr>
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<td>ENG 128 The Dynamics of Communication</td>
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<td>PSY 206 Adolescent Psychology</td>
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**PROGRAMS OF STUDY**

Is a 4-year degree in your future?

An Associate in Arts (A.A.) or Associate in Science (A.S.) degree from Union County College is fully transferable as the first two years of a baccalaureate degree program at any New Jersey public four-year institution under the Comprehensive State-Wide Transfer Agreement.
These students are graduates of Union County College who were part of the American Honors program. They served as ALC tutors and other leadership roles at the college.

Your Support Made a Difference for These Scholars

Continuing their Educations at Elite Four-Year Institutions

Despite the challenges brought about during the spring 2020 semester by the pandemic, three determined and intelligent young women were not deterred from following their dreams. They graduated in May 2020 and have gone on to make their marks at elite colleges.

Beianka Tomlinson is our first graduate to transfer to Princeton University. She is a chemistry major, minorin in African American studies. While Beianka’s classes have been remote and despite not being on campus, she is amazed by how different the culture is at Princeton. Her classes require a lot more reading and time. Her ultimate goal is to attend medical school and become a surgeon.

Dartmouth student Kamilla Kocsis lives on campus, yet her classes are remote. Her major is international relations, and she also acknowledged the amount of reading and studying required for each class. Kamilla joined the women’s snowboarding team and loves winter hiking on local trails. She is also studying German with plans to study abroad.

Vasiliki “Vas” Vlastaras will begin at Georgetown University in spring 2021. She plans to major in government and minor in modern Greek. In the future, she sees herself as a lobbyist or campaign staffer. She is excited for the experience even though her classes will be remote.

These three phenomenal students made their start at Union by taking advantage of the opportunities offered here: excellent faculty, honors classes, student activities, and more. Remember their names because there is no doubt they are going places.
EDUCATIONAL INTERPRETER PROGRAM (EIP)

American Sign Language – English Interpreters in the Pre-K to 12th Grade Academic Setting
CERTIFICATE OF ACHIEVEMENT

The Department of Education, New Jersey Administrative Code 6A:9-13.18 Educational Interpreters requires Sign Language/English Interpreters in the Pre-K to 12th grade academic setting to have a “Standard Educational Services Certificate with a sign language interpreting endorsement” through the state of New Jersey. To receive this endorsement educational interpreters are required to take the Educational Interpreter Performance Test (EIPA) and pass with a 3.0 or higher along with a 15 semester hour sequence of academic coursework.

Increased numbers of Deaf and Hard of Hearing children are mainstreamed in the public school system, which means there is an increased number of educational interpreters in demand.

The EIP courses provide students with knowledge regarding their unique role and responsibilities as educational interpreters and their role as a member of the education team in the various interpreter assignments within multiple educational settings.

Prerequisite: Approval of Division Dean’s office and official transcript review is required prior to registration.

Upon successful completion of all program requirements, graduates will be able to:

- Discuss characteristics of the New Jersey Core Curriculum Content Standards;
- Identify and define characteristics of a curriculum including instructional;
- Outline historical and current trends of childhood language development;
- Relate strategies and techniques for facilitating English language development in Deaf children including, but not limited to alternative forms of communication, bilingual/bicultural issues, assertive technology, sign support, and oral/auditory philosophies;
- Compare and discuss the different philosophies of child development; (i.e. Freud’s psychoanalytic or Freudian theory, Erikson’s Eight Stages of Human Development, Psychosocial Development, Piaget’s Stages of Cognitive Development and Adolescent Development, source information taken from the American Academy of Child Psychiatry materials and how they apply to children who are deaf, hard of hearing, and deaf-blind;
- Differentiate the interaction of physical, cognitive, emotional, linguistic, social and cultural factors within developmental stages and how they affect children with specialized needs and deaf, hard of hearing, and deaf-blind children;
- Complete a comparison of the development of children without specialized needs with the development and issues facing children and families with specialized needs;
- Discuss how different paradigms within the profession of sign language interpreting impact on the application and interpretation of ethical standards and behavior;
- Discuss the various disability laws and how they apply to deaf and hard of hearing children prek to 12. (PL 89-333 Vocational Rehabilitation Act of 1965, PL 93-112 Rehabilitation Act of 1973, Section 501, Section 503, Section 504 recipients of federal assistance, PL44-124 Education for all Handicapped Children Act, Americans With Disabilities Act, IDEA, No Child Left Behind);
- Develop understanding and apply knowledge of the N.J. Administrative Code in daily work in the Pre-K to 12 academic setting.

RECOMMENDED SEQUENCE

CERTIFICATE COURSES

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>CR.</th>
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<tr>
<td>FALL SEMESTER</td>
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<tr>
<td>EIP 202</td>
<td>Language Development</td>
<td>3</td>
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<tr>
<td></td>
<td>for the Educational Interpreter – Online</td>
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<tr>
<td>EIP 204</td>
<td>Ethics and Laws for Educational Interpreters – Online</td>
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<td>EIP 210</td>
<td>Deaf-Blind Interpreting and Interpreting Strategies</td>
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<td>Methods of Instruction for Educational Interpreters – Online</td>
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<td>EIP 203</td>
<td>Child Development for Educational Interpreters – Online</td>
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<tr>
<td>Total Program Credits:</td>
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</table>

AFTER UNION COUNTY COLLEGE

Graduates may apply for the “Standard Educational Services Certificate with a sign language interpreting endorsement” through the state of New Jersey (Licensure) along with Educational Interpreting Performance Assessment (EIPA) score of 3.0 or higher. These graduates will work in the academic setting, Pre-K to 12 grades.

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
The Emergency Medical Studies Certificate is intended for students who are interested in helping and treating patients in an emergency setting outside of the hospital. Prospective students should have interest in pathophysiology, basic medical concepts, patient care and be able to function effectively in a dynamic work environment.

The Emergency Medical Studies program of the certificate of achievement meets or exceeds the National Standard Curriculum set forth by the US Department of Transportation and adheres to New Jersey State Emergency Medical Technician Regulations NJAC 8:40 and 8:40A. The program is approved and sanctioned by the New Jersey Department of Health and Human Services – Office of Emergency Medical Services www.state.nj.us/health/ems/.

The Certificate in Emergency Medical Studies is intended for prospective students that have obtained an academic degree or for those interested in a healthcare career.

EMERGENCY MEDICAL STUDIES CERTIFICATE ENTRANCE REQUIREMENTS:

Prospective students must meet the following requirements to be accepted into the program:

- Have a current Health Care Provider CPR certification, or completed EMT 100 prior to enrolling in EMT 106.

Further Emergency Medical Studies Certificate Information:

- The mandatory orientation session is held in one week prior to the start of each semester. The exact date will be provided upon enrollment in EMT 106. There is no makeup session for this mandatory orientation session.

- Students are required to submit proof of current good general health and vaccination status results at orientation in order to meet the clinical portion of the program. The fees associated with these tests are paid by the student.

- Students should refer to the course syllabi for exact meeting dates and times.

Upon successful completion of the Emergency Medical Studies graduates will be able to:

- Perform competently in the roles and responsibilities outlined in the NJ State emergency medical technician scope of practice;

- Manage pre-hospital patient care based on appropriate emergency medicine and pre-hospital care science for individuals of all age groups;

- Demonstrate critical thinking in decision making processes to improve the health and welfare of pre-hospital patients;

- Communicate effectively, orally and in writing, with pre-hospital patients, their families, and fellow health team members, maintaining a professional manner and patient confidentiality.

RECOMMENDED SEQUENCE

<table>
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<tr>
<th>FALL SEMESTER</th>
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<tbody>
<tr>
<td>Course#</td>
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<tr>
<td>ENG 101</td>
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<tr>
<td>PSY 101</td>
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<tr>
<td>ALH 161</td>
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<td>EMT 106</td>
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<td>BIO 102</td>
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<td>COM 100</td>
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<td>PSY 204</td>
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<tr>
<td>SOC 101</td>
</tr>
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<td>Semester Total:</td>
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</table>

Total Program Credits: 30

AFTER UNION COUNTY COLLEGE

After successful completion of the licensing/certification exams, graduates of the program may obtain both a national and New Jersey Emergency Medical Technician (EMT) License making the graduate eligible for employment at an EMT service nationally. Graduates can apply to an Allied Health program (i.e.: Health Science, Licensed Practical Nursing, Paramedic Studies, Physical Therapy Assistant), to the Sport Management Program to complete an Associate’s Degree or to a four-year institution for continuation of a bachelor’s degree.

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
The Emergency Medical Studies Certificate of Achievement is intended for students who are interested in helping and treating patients in an emergency setting outside of the hospital. Prospective students should have interest in pathophysiology, basic medical concepts, patient care and be able to function effectively in a dynamic work environment.

The Emergency Medical Studies program of the certificate of achievement meets or exceeds the National Standard Curriculum set forth by the US Department of Transportation and adheres to New Jersey State Emergency Medical Technician Regulations NJAC 8:40 and 8:40A. The program is approved and sanctioned by the New Jersey Department of Health and Human Services - Office of Emergency Medical Services www.state.nj.us/health/ems/.

The Certificate of Achievement in Emergency Medical Studies is intended for prospective students that have obtained an academic degree or for those interested in a healthcare career.

EMERGENCY MEDICAL STUDIES
CERTIFICATE OF ACHIEVEMENT

ENTRANCE REQUIREMENTS:
Prospective students must meet the following requirements to be accepted into the program:

- Have a current Health Care Provider CPR certification, or completed EMT 100 prior to enrolling in EMT 106.

Further Emergency Medical Studies Certificate of Achievement Information:

- The mandatory orientation session is held in one week prior to the start of each semester. The exact date will be provided upon enrollment in EMT 106. There is no makeup session for this mandatory orientation.
- Students are required to submit proof of current good general health and vaccination status results at orientation in order to meet the clinical portion of the program. The fees associated with these tests are paid by the student.
- At times, the EMT 106 Program may not adhere to the published college calendar. Students should refer to the course syllabi for exact meeting dates and times.

Upon successful completion of the Emergency Medical Studies Certificate of Achievement graduates will be able to:

- Sit for the National Registry Exam (EMT Basic) as required by the New Jersey State Department of Health and Senior Services - Office of Emergency Medical Services enabling them to become licensed providers;
- Obtain employment as an entry-level Emergency Medical Technician with an EMT service nationally. Graduates may enroll in a full Emergency Medical Sciences Certificate program make application into a two-year Allied Health Science program (i.e.: Health Science Licensed Practical Nursing, Paramedic Studies, Physical Therapy Assistant), Sport Management Program or to a four-year institution for continuation of a bachelor's degree.

AFTER UNION COUNTY COLLEGE

After successful completion of the licensing/certification exams, graduates of our program may obtain both a national and New Jersey Emergency Medical Technician (EMT) License making the graduate eligible for employment at an EMT service nationally. Graduates may enroll in a full Emergency Medical Sciences Certificate program make application into a two-year Allied Health Science program (i.e.: Health Science Licensed Practical Nursing, Paramedic Studies, Physical Therapy Assistant), Sport Management Program or to a four-year institution for continuation of a bachelor's degree.

RECOMMENDED SEQUENCE

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<th>FALL SEMESTER</th>
<th>COURSE#</th>
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<td>ENG 101</td>
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<td>PSY 101</td>
<td>General Psychology</td>
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<td>ALH 161</td>
<td>Medical Terminology</td>
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Total Program Credits: 16

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information www.ucc.edu/academicmaps

PROGRAMS OF STUDY
The Engineering program offers the first two years of a four-year engineering curriculum and prepares graduates for transfer to bachelor’s degree programs at leading engineering colleges throughout the country. The first two years are common to most fields of engineering (e.g., civil, electrical, and mechanical), but in the second year some students may begin to specialize in a field of their choice (e.g., chemical engineering).

Union County College has dual admissions and formal transfer agreements with New Jersey Institute of Technology, Rutgers University, and other colleges. Due to the diversity of engineering curricula in certain fields of specialization, it is sometimes necessary for graduates to take one or two additional courses before attaining junior status at the transferring college.

The stated sequence of courses for the Engineering program assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:

- Employ computer software applications to represent and solve technical problems;
- Analyze problems of a technical nature and evaluate the merits of alternative proposals in the design of computer based solutions;
- Perform laboratory procedures and assess the validity of experimental/diagnostic data;
- Employ critical thinking and problem solving skills to solve technical problems;
- Express and interpret both technical and non-technical concepts orally, in writing, and in electronic formats;
- Demonstrate information literacy through familiarity and the effective use of engineering information resources.

AFTER UNION COUNTY COLLEGE
Graduates are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

### Milestones

Milestone courses (shown in bold) in the recommended course sequence identify critical course requirements and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

### Career and Transfer Information
www.ucc.edu/academicmaps

### RECOMMENDED SEQUENCE

#### FIRST YEAR

<table>
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<tr>
<th>Course#</th>
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<td>ENG 101</td>
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#### SECOND YEAR

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<td>OR Tech Elective 1 (Chemical)</td>
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<tr>
<td>OR Tech Elective (Electrical)</td>
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<td>ECO 202</td>
<td>Principles of Economics II</td>
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Total Program Credits: 60

* The stated sequence of courses for the Professor Elmer Wolf Engineering program assumes that the student is math-ready for calculus.

**Engineering Track Electives**

- Engineering Track Elective credits require approval of Division Dean’s office or designee and are selected dependent on the track from which the student is following. See the tracks below.

**Mechanical Engineering Track Electives**

1. EGG 201 - Engineering Mechanics (Static) 3 credit hours
2. EGG 202 - Engineering Mechanics (Dynamics) 3 credit hours
3. MET 106 - Engineering Materials and Processes 3 credit hours

**Civil Engineering Track Electives**

1. EGG 201 - Engineering Mechanics (Static) 3 credit hours
2. EGG 202 - Engineering Mechanics (Dynamics) 3 credit hours
3. Elective 3 credits

**Electrical Engineering Track Electives**

1. EGG 201 - Engineering Computer Graphics 2 credit hours
2. EGG 202 - Digital Design 3 credit hours
3. EGG 207 - Principles of Electrical Engineering 4 credit hours

**Chemical Engineering Track Electives**

1. CHE 211 - Organic Chemistry I 5 credit hours
2. Elective 4 credits (CHE 212 - Organic Chemistry II recommended 5 credit hours)
The Engineering Technology program provides a pathway to employment as well as continuation at a bachelor level in Engineering Technology. The program allows the student to choose from two concentrations in Electrical and Mechanical Engineering Technology.

**Career Paths:**
A graduate of this program has the option of entering the job market as an entry level member of the technical or engineering staff. The specific job title is determined by the specific technology track taken.

Electronics/Electromechanical Engineering Technology graduates have the option of working as a field service technician with firms in the communication, computer, electrical, medical, or transportation industries.


Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate theoretical and practical competency in engineering technology, including the basic principles of fluid mechanics, statics, and strength of materials;
- Employ critical thinking to solve technical problems, in general, and to apply engineering technology problem solving methods based on business and industry standards;
- Express and interpret both technical and non-technical concepts orally, in writing, and in electronic formats;
- Demonstrate information literacy through familiarity and the effective use of technical documents in the field of mechanical engineering technology.

**AFTER UNION COUNTY COLLEGE**
Graduates have the option of entering a Bachelor of Science in Technology program or accepting positions as field service representatives or laboratory technicians with firms in the computer and electronic fields.

**RECOMMENDED SEQUENCE**

**FIRST YEAR**

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
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<td>FALL Semester</td>
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<tr>
<td>ENG 101</td>
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<tr>
<td>MAT 171</td>
<td>Unified Calculus I*</td>
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<tr>
<td>EET 101</td>
<td>Principles of DC Circuits</td>
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<td>MET 109</td>
<td>Computer-Aided Drafting</td>
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<td>MET 112</td>
<td>Mechanics-Statics</td>
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<td>EET 111</td>
<td>Digital Computer Fundamentals</td>
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**SECOND YEAR**

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<td>CST 115</td>
<td>Introduction to Computer Programming</td>
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<tr>
<td>PHY 101</td>
<td>General Physics I AND</td>
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<td>PHYL 111</td>
<td>Mechanics Laboratory</td>
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<tr>
<td>Track Elective (EET)(^2)</td>
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<td>Track Elective (MET)(^2,3)</td>
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<td>Track Elective (MET)(^4,5)</td>
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<td>ECO 201</td>
<td>Principles of Economics I</td>
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<td>PHYL 102</td>
<td>General Physics II Laboratory</td>
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<td>Total Program Credits:</td>
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</table>

Notes:
* The stated sequence of courses for the Engineering Technology program assumes that the student is math-ready for calculus.
** Students are strongly encouraged to take MAT 172 as the Math Gen Ed Requirement

**TRACK ELECTIVES:**

**Electronics/Electromechanical Engineering Technology Track:**
- First Year, Spring Semester
  - EET 102 3 credit hours
- Second Year, Fall Semester
  - EET 201 5 credit hours
- Second Year, Spring Semester
  - CIT 210 3 credit hours
  - CIT 215 3 credit hours
The English degree program is designed for the students interested in focusing on literature and writing in an interrelated academic environment. The program features a broad range of courses in English language, literature, and composition, including introduction to literature, survey courses, genre courses, diversity-based and interdisciplinary courses, and writing-intensive courses. The program will enable interested students to begin their major in English at Union County College and transfer to a four-year institution to continue their academic advancement on the baccalaureate level.

Upon successful completion of all program requirements, graduates will be able to:

- Write clearly, grammatically, and fluently with focus and continuity in standard American English;
- Demonstrate the ability to revise papers through the writing process;
- Demonstrate clarity, analytical skill, and organization to present and support ideas in formal papers and in-class writings;
- Articulate their evolving point of view about literature, authors, diverse cultures, and periods, and about compositional artistry, creativity, and style;
- Apply technology skills to write research papers that explore critical inquiry on works and authors studied; judge reliable sources for such writing;
- Discuss major writers, movements, cultures, and works covered in a given course in ways that demonstrate analytical competency and compositional skill;
- Illustrate the interrelatedness of literature, literary theory, and composition through discussion and written analysis.

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a related program at a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.
The Entertainment Technology certificate will provide students with a solid foundation for further study and employment in the growing field of entertainment, which encompasses live events, video games, film/TV/radio, and more. Students will learn the foundations of multi-track session recording and video production and editing as well as Mastering/Restoration techniques. Also, students will gain the requisite training and skills using industry-standard equipment and software. Emphasis will be placed on the use and application of DAW & MIDI (Cubase & Adobe Audition), and film editing systems (Adobe Premiere).

Upon successful completion of all program requirements, graduates will be able to:

- Apply the fundamentals of audio engineering and digital imaging and video editing for the field of entertainment technology;
- Discuss ethical issues and social responsibilities related to the field of entertainment technology;
- Communicate, both orally and in writing, the history of entertainment technology;
- Utilize critical thinking and current entertainment technology tools and software to execute productions in the field;
- Demonstrate knowledge of the fundamental process and sequence involved in the entertainment technology field, using a variety of information literacy techniques.

**FIRST YEAR**

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
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</thead>
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<tr>
<td>COM 100</td>
<td>Communications Technologies</td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
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<tr>
<td>FIA 105</td>
<td>Music Appreciation</td>
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<tr>
<td>COM 103</td>
<td>Introduction to Radio Broadcasting</td>
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<tr>
<td>COM 113</td>
<td>Audio Production I</td>
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<tr>
<td>COM 209</td>
<td>The Evolution of Film</td>
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<tr>
<td>COM 213</td>
<td>Audio Production II</td>
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<tr>
<td>COM 216</td>
<td>Digital Video Editing and Multimedia Imaging</td>
<td>3</td>
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<td>HIS 101</td>
<td>Introduction to Western Civilization I</td>
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<td>PSY 101</td>
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<td>Total Program Credits: 31</td>
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</table>

**AFTER UNION COUNTY COLLEGE**

Graduates of the Entertainment Technology certificate program can enter crew and entry-level positions that support entertainment events for a variety of organizations. Graduates can also continue their studies in the Media Option offered through the Communications, A.A. program at Union County College.

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
This degree option is developed for the students who wish to acquire knowledge about the history, community, and business of eSports with future employers and other stakeholders in the industry. Students will develop effective communications geared towards fans and decision makers within the eSports industry, and develop actionable suggestions to encourage growth or improvement in the eSports industry. This degree option prepares students with project management skills and tools needed to plan and execute eSports events.

Upon successful completion of all program requirements, graduates will be able to:

- Analyze the sociological, financial, and historical influences in the sports industry;
- Explain how sports impact local, national and international affairs;
- Interpret the aspects of finance, human resources, marketing, budgeting, career exploration, and resume writing in sports;
- Communicate effectively in writing, verbal, and electronic formats to a diverse, multicultural audience in the field of sports;
- Apply critical thinking to understand current and emerging trends in eSports;
- Demonstrate knowledge of basic principles of management in the eSports industry.

AFTER UNION COUNTY COLLEGE

Graduates of this program may work in one of the many areas of this rapidly growing industry. Students may also transfer to a college or university that offers a bachelor’s degree in Sport Management.
This Certificate of Achievement program is for students who wish to acquire knowledge about the history, community, and business of eSports as well as learn about employers and other stakeholders in the industry. Students will develop effective communication skills focused on decision making within the eSports industry. This Certificate of Achievement provides students with project management skills and tools needed to plan and execute eSports events.

Upon successful completion of all program requirements, graduates will be able to:
- Apply critical thinking, ethical reasoning, and quantitative reasoning skills to understand and resolve issues in eSports;
- Explain the culture of eSports, its audience and fan base, and dominant game genres that make up the industry;
- Analyze the sociological, financial, and historical influences on the field of eSports management;
- Interpret the aspects of finance, human resources, marketing, budgeting, career exploration, and resume writing in eSports.

Upon successful completion of all program requirements, graduates will be able to:
- Apply critical thinking, ethical reasoning, and quantitative reasoning skills to understand and resolve issues in eSports;
- Explain the culture of eSports, its audience and fan base, and dominant game genres that make up the industry;
- Analyze the sociological, financial, and historical influences on the field of eSports management;
- Interpret the aspects of finance, human resources, marketing, budgeting, career exploration, and resume writing in eSports.

**AFTER UNION COUNTY COLLEGE**

Graduates of this program may work in one of the many areas of this rapidly growing industry. Students may also transfer to a college or university that offers a bachelor's degree in Sport Management.
The Fire Science Technology Program provides the opportunity for in-depth study and critical thinking of fire suppression topics. It prepares the student for excellence in the fire service whether as a volunteer, industrial or career firefighter. Students develop a solid foundation to achieve increased levels of responsibility and leadership in the fire service of tomorrow.

Upon successful completion of all program requirements, graduates will be able to:

- Explain the organization and management of fire departments;
- Analyze hazardous material incidents and use information technology to develop written incident action plans that demonstrate an appropriate and logical process for safely protecting the public, property and environment;
- Identify fire ground conditions and select appropriate firefighting strategies;
- Utilize incident command to apply proper tactical assignments to achieve fire ground objectives;
- Demonstrate knowledge of fire prevention including fire detection and its causes, fire prevention systems, and building codes in written, verbal, and electronic formats;
- Apply problem-solving skills including the use of technology to specific fire ground situations;
- Demonstrate information literacy, familiarity, and effective application of technical information documents in the field of fire science technology.

AFTER UNION COUNTY COLLEGE

Graduates with this degree will have the basic knowledge necessary to begin a challenging career in fire protection.
GAME DESIGN AND DEVELOPMENT
ASSOCIATE IN APPLIED SCIENCE DEGREE

Game Design and Development is a comprehensive two-year program leading to an Associate in Applied Science degree. The program introduces students to a variety of animation, programming and gaming concepts. Students learn the concepts of 3D graphics, particle systems, rendering, collision detection, and game algorithms. Students also gain an understanding of the connection between game design with physics and mathematics. For better design, students are also required to successfully complete fine arts and creative writing courses. The program provides students with the skills necessary for entry-level positions in the game design and animation and game development industry.

Upon successful completion of all program requirements, graduates will be able to:
- Define game design terminology;
- Discuss the role of intellectual property, copyright, trademarks and patents in gaming;
- Demonstrate animation techniques in game design development;
- Apply the skills and concepts utilized in the game design industry including time management skills;
- Design storyboards and prototypes for specific game design concepts;
- Design and create complete 2D and 3D game assets to interactive games;
- Communicate effectively in writing, verbal and electronic formats.

AFTER UNION COUNTY COLLEGE

Graduates can apply for entry-level positions in the field of Game Design, 3D modeling animation and Game Development, or may transfer to four-year colleges or universities in Game Design or a similar degree program.

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
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<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>ENG 101 English Composition I</td>
<td>3</td>
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<tr>
<td></td>
<td>FIA 104 Fundamentals of 2D Design</td>
<td>3</td>
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<tr>
<td></td>
<td>MAT 144 Elementary Mathematical Analysis II*</td>
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<tr>
<td></td>
<td>CST 115 Introduction to Computer Programming</td>
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<td>GDP 101 Fundamentals of Game Design</td>
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<tr>
<td>Semester Total:</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>COM 105 Storytelling for Digital Media</td>
<td>3</td>
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<tr>
<td></td>
<td>FIA 108 Appreciation of Art</td>
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<tr>
<td></td>
<td>CST 161 Computer Programming Fundamentals</td>
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<td>GDP 112 Introduction to Game Programming</td>
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<td>GDP 115 The Business of Game Development</td>
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SECOND YEAR

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<td>ENG 102 English Composition II</td>
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<td>PHY 101 General Physics I</td>
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<td>PHYL 111 Mechanics Laboratory</td>
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<td>FIA 130 Introduction to Graphic Design</td>
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<td>GDP 201 Digital Animation for Games</td>
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<td>GDP 212 Artificial Intelligence for Games</td>
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<td>SPRING SEMESTER</td>
<td>GDP 215 3D Game Graphics Programming</td>
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<td>GDP 280 Game Design and Development Capstone</td>
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<td>PSY 101 General Psychology</td>
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<td>COM 109 Introduction to Film Study</td>
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Total Program Credits: 60

* A higher level math course may be substituted. Division approval is required.
In this multidisciplinary degree, students are provided with a theoretical and practical understanding of the artistic as well as commercial area of graphic design. Students receive training in a wide range of activities including typography, publication design, computer-aided graphic design, and web design. Students create digital works using cutting-edge software, such as the Adobe Creative Suite, including Illustrator, Photoshop, InDesign, and Animate.

Upon successful completion of all program requirements, graduates will be able to:

- Discuss the theoretical skills involved in creating graphic visual solutions and the historical aspect of graphic design;
- Create digital visual solutions in print and in multimedia that utilize a creative approach for producing graphic design solutions including images, typography, color, photography, sound, and motion;
- Demonstrate, through oral and written communication, skills needed to work with clients throughout the process of design problem-solving, from research, design, and production to professionally presenting finished work;
- Utilize various research methods and observational techniques to solve design problems;
- Create a capstone project that will serve as the focus of a portfolio for print and digital media.

AFTER UNION COUNTY COLLEGE
Graduates can transfer to a related program at a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

### RECOMMENDED SEQUENCE

#### FIRST YEAR

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<th>COURSE#</th>
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<td>ENG 129</td>
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<td>Lab Science Gen Ed Requirement</td>
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<td>FIA 109</td>
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#### SECOND YEAR

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<td>PSY 101</td>
<td>General Psychology</td>
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<td>Math, Science, Technology Gen Ed Requirement</td>
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<td>FIA 111</td>
<td>Art History Survey I</td>
<td>3</td>
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<td>OR</td>
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<tr>
<td>FIA 112</td>
<td>Art History Survey II</td>
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<tr>
<td>COM 112</td>
<td>Multimedia Development I</td>
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<tr>
<td>FIA 230</td>
<td>Advanced Graphic Design</td>
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<td>Modern Language Gen Ed Requirement</td>
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<td>History Gen Ed Requirement</td>
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Total Program Credits: 60

* FIA 108 is recommended
This Graphic Design Certificate provides students who need a certificate to start working in the market as a graphic designer with a practical understanding of the commercial area of graphic design. In this multi-disciplinary certificate students receive training in a wide range of activities including typography, publication design, computer-aided graphic design, and web design. Students create digital works using cutting-edge software, such as the Adobe Creative Suite, including Illustrator, Photoshop, InDesign, and Animate.

Upon successful completion of all requirements, graduates will be able to:

- Demonstrate an understanding of the practical skills involved in creating visuals, combining images and typography;
- Demonstrate knowledge of appropriate color and paper selection for print and non-print media;
- Understand and utilize digital design software and website development tools to prepare graphic examples;
- Create a portfolio that demonstrates competency in graphic design.

**AFTER UNION COUNTY COLLEGE**

Graduates can work in the field of graphic design or further their education in the discipline.

### RECOMMENDED SEQUENCE

#### FIRST YEAR

<table>
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<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<td>ENG 101</td>
<td>English Composition I</td>
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<td>FIA 104</td>
<td>Fundamentals of 2D Design</td>
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<tr>
<td>FIA 130</td>
<td>Introduction to Graphic Design</td>
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<td>FIA 111</td>
<td>Art History Survey I</td>
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<tr>
<td>Semester Total:</td>
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</table>

| **SPRING SEMESTER**                             |     |
| ENG 128 | The Dynamics of Communication       | 3   |
| Humanities Gen Ed Requirement*                  | 3   |
| FIA 230 | Advanced Graphic Design             | 3   |
| FIA 109 | Introduction to Drawing             | 3   |
| Math, Science, Tech Gen Ed Requirement          | 4   |
| Semester Total:                                  | 16  |

**Total Program Credits:** 31

*FIA 108 recommended.*
The AAS degree in Health Information Technology offers a 60-credit integrated curriculum of general education and professional requirements based on entry-level competencies identified by the Commission on Accreditation for Health Informatics and Information Management (CAHIM) education programs. Health Information Technology involves the use of technology to facilitate the electronic exchange and management of health information such as electronic health records; database management; information privacy and security. It encompasses an array of technologies used to store, share and analyze health information. The major in Health Information Technology at Union County College is designed to prepare students from diverse backgrounds for entry-level technical and managerial career opportunities in the use of technology to store, share, and analyze health information. Graduates will be eligible to take a national credentialing examination for certification as a Registered Health Information Technician (RHIT). In addition, the Health Information Technology major is an excellent choice for students who may wish to pursue a bachelor’s and advanced degrees in Health Information Management. It is particularly attractive to students seeking a major with a high career potential.

Upon successful completion of all program requirements, graduates will be able to:

- Use health information systems to support quality assurance, financial reimbursement, and legal and ethical standards;
- Evaluate healthcare data to synthesize relevant health information for quality assurance;
- Accurately code patient records;
- Apply billing reimbursement methodologies to patient;
- Collaborate effectively with diverse individuals and members of the healthcare team.

AFTER UNION COUNTY COLLEGE

Graduates of the program will be eligible to work as clinical coding and billing specialists, medical records analysts, medical records supervisors, or medical information technician. Health information technicians may work in a variety of healthcare settings that include hospitals, physician practices, nursing homes, mental health facilities, long-term care, home health care, rehabilitation facilities, managed care organizations, public health agencies, government agencies, health information technology firms, insurance agencies, consulting and law firms, pharmaceutical companies, and health product vendors among others.
HEALTH SCIENCE
ASSOCIATE IN SCIENCE DEGREE

The Health Science program is designed for students to incorporate knowledge from general education and the health sciences and apply it in an entry-level position, or transfer the academic credits to a four-year institution. Information that is important to the health care professional will be presented throughout the curriculum, including critical aspects of health, wellness, and disease. Students have the opportunity to apply course work in nursing, allied health and/or relevant social sciences toward the degree.

Completion of this program will serve as a foundation for those who wish to further their health care careers.

Upon successful completion of all program requirements, graduates will be able to:

- Communicate effectively, both orally and in writing, especially on issues related to health and society;
- Apply clinical reasoning in health care scenarios;
- Access information from appropriate sources relevant to health care issues;
- Recognize health care needs and concerns within a diverse society;
- Demonstrate knowledge, skills, and attitudes related to management of health, wellness, and disease conditions;
- Integrate legal and ethical principles into situations within various health care settings.

AFTER UNION COUNTY COLLEGE

Graduates of this program are prepared to pursue a number of entry-level careers within the broad field of health science with positions such as case managers, patient advocates, and community health liaisons.

Students may transfer to four-year institutions that offer baccalaureate degrees in Health Science, such as St. Elizabeth University.

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
</tr>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities Gen Ed Requirement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY 101 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC 101 Principles of Sociology</td>
<td>3</td>
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<tr>
<td></td>
<td>BIO 105 Anatomy and Physiology I</td>
<td>4</td>
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<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>BIO 102 Human Biology</td>
<td>4</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>ENG 102 English Composition II</td>
<td>3</td>
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<tr>
<td></td>
<td>PSY 204 Lifespan Development</td>
<td>3</td>
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<td></td>
<td>PSY 205 Child Psychology</td>
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<td></td>
<td>Mathematics Gen Ed Requirement</td>
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<tr>
<td></td>
<td>BIO 106 Anatomy and Physiology II</td>
<td>4</td>
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<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>CHE 114 Principles of Organic Chemistry and Biochemistry</td>
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SECOND YEAR

<table>
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<tr>
<th>COURSE#</th>
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<tr>
<td>FALL SEMESTER</td>
<td>ENG 128 The Dynamics of Communication</td>
<td>3</td>
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<td>Elective Gen Ed Requirement</td>
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<td></td>
<td>Elective</td>
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<tr>
<td></td>
<td>ALH 161 Medical Terminology</td>
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<td></td>
<td>ALH 201 Pathophysiology &amp; Health Care*</td>
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<tr>
<td>SPRING SEMESTER</td>
<td>Applied Health Courses**</td>
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<td>Elective Gen Ed Requirement</td>
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<tr>
<td>Total Program Credits:</td>
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<td>60</td>
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</table>

* Students completing foundation courses in nursing and/or allied health may apply credit or challenge the course.
** The following courses could be used for the 12 credits in nursing or allied health:
  - BIO 107 Decisions for Wellness
  - BIO 108 Microbiology
  - EMT 100 - Cardiopulmonary Resuscitation
  - EMT 106 - Emergency Medical Technician
  - Gerontology
  - Interpreting
  - Paramedic
  - PTA
  - Practical Nursing
  - Psychology
  - Psychosocial Rehabilitation
  - Radiology, Sonography
  - RN courses – Trinitas or Muhlenberg
The History program is designed for students preparing to transfer to a four-year college or university to pursue a Bachelor of Arts degree in History. The program provides a strong foundation in history, the humanities, and the social sciences. It prepares students for a career in history, public history, legal studies, government, the publishing industry, research, and education. Courses in this program focus on reading, writing, research, critical thinking, and presentation skills.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate, in written or oral communication, knowledge of key historical facts, values, persons, and ideas;
- Evaluate historical evidence for bias and for relevance to major historical issues and controversies;
- Explain change over time, cross-cultural connections, and links between the past and the present;
- Discuss the ethical consequences of historical events and decisions;
- Demonstrate, in written or oral communication, knowledge of the various approaches to history including political, social, cultural, intellectual, and economic interpretations;
- Analyze evidence derived from primary and secondary sources to support a thesis;
- Conduct historical research according to professional standards.

**AFTER UNION COUNTY COLLEGE**

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

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### RECOMMENDED SEQUENCE

#### FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
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<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td>HIS 101</td>
<td>Introduction to Western Civilization I</td>
<td>3</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS 103</td>
<td>Introduction to World History I</td>
<td>3</td>
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<tr>
<td>MAT 125</td>
<td>Survey of Special Topics in Mathematics</td>
<td>4</td>
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<td>OR</td>
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<tr>
<td>MAT 127</td>
<td>Elementary Statistics</td>
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<tr>
<td>ENG 102</td>
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<tr>
<td>HIS 104</td>
<td>Introduction to World History II</td>
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<tr>
<td>GOV 201</td>
<td>American Government and Politics</td>
<td>3</td>
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<tr>
<td>Lab Science Gen Ed Requirement</td>
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<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
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#### SECOND YEAR

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<td>HIS 201</td>
<td>United States History to 1865</td>
<td>3</td>
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<td>PHI 212</td>
<td>Logic and Critical Thinking</td>
<td>3</td>
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<tr>
<td>Lab Science Gen Ed Requirement</td>
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<tr>
<td>Diversity Gen Ed Requirement</td>
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<tr>
<td>History Elective</td>
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<td><strong>Semester Total:</strong></td>
<td><strong>16</strong></td>
<td></td>
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<tr>
<td><strong>SPRING SEMESTER</strong></td>
<td></td>
<td></td>
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<tr>
<td>HIS 202</td>
<td>United States History Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities Gen Ed Requirement</td>
<td>3</td>
<td></td>
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<tr>
<td>ECO 201</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>GOV 202</td>
<td>American National Government</td>
<td>3</td>
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<tr>
<td><strong>Semester Total:</strong></td>
<td><strong>15</strong></td>
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</tr>
</tbody>
</table>

Total Program Credits: 60
The main focus of the Homeland Security Program is to provide students with the skills required for employment and a foundation for further study in this area. The program will also provide skills for people already employed in the Homeland Security field. Upon successful completion of all program requirements, graduates will be able to:

- Describe principles of information technology;
- Summarize basic forensic procedures;
- Demonstrate knowledge of criminal investigations;
- Explain the history and development of private security and how it fits into the Criminal Justice System.

This program is designed for people working in the Criminal Justice/Security Field, as well as for people who are planning to work in the Criminal Justice/Security Field.

**RECOMMENDED SEQUENCE**

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 206</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>COM 100</td>
<td>Communications Technologies</td>
<td>4</td>
</tr>
<tr>
<td>CRJ 203</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 223</td>
<td>Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>CST 210</td>
<td>Principles of Cybersecurity</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits: 16

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
The Hotel, Restaurant, and Tourism Management program provides Union County College students with a strong business and customer service foundation required for careers in the dynamic and expanding, hotel, restaurant, and tourism industry. Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate the ability to perform the essential elements of management including following a code of ethics within the hotel, restaurant, and tourism industries;
- Demonstrate leadership skills and abilities to lead, motivate, and manage others, and resolve conflicts;
- Discuss fundamental principles of the hospitality and tourism industry in a diverse global environment;
- Apply knowledge of sales and marketing, hotel front office management, customer service and food and beverage in the hospitality industry;
- Demonstrate teamwork, quality improvements, and the ability to make educated decisions in this ever changing, complex, international industry;
- Communicate effectively in oral, written, and electronic formats in hotel, restaurant, and tourism industries;
- Apply critical thinking, decision making skills, strategic planning, and problem-solving skills;
- Demonstrate information literacy through familiarity and the effective use of technical literature in the areas of Hotel, Restaurant, and Tourism Management.

After Union County College

Graduates can enter an exciting career in the rapidly growing hotel, restaurant, and tourism industry or transfer to a four-year college or university. Consultation with the Division Dean's office is advised.

### Milestones

Milestone courses (shown in bold) in the recommended course sequence identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

---

### Recommended Sequence

#### First Year

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 113</td>
<td>Math Applications or higher level math*</td>
<td>3</td>
</tr>
<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>HSM 100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Organization and Management</td>
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<tr>
<td><strong>Semester Total:</strong></td>
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<td>15</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 122</td>
<td>Introductory Technical and Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>HSM 110</td>
<td>Food and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Semester Total:</strong></td>
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</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th>Course#</th>
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<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSM 220</td>
<td>Managing Housekeeping Operations</td>
<td>3</td>
</tr>
<tr>
<td>HSM 240</td>
<td>Hospitality Sales and Marketing</td>
<td>3</td>
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<tr>
<td>BUS 107</td>
<td>Human Resources Management</td>
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<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>HSM 205</td>
<td>Planning and Control of Food and Beverage Operations</td>
<td>3</td>
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<tr>
<td>HSM 290</td>
<td>Co-op Experience in Hospitality Management</td>
<td>3</td>
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<tr>
<td>BUS 110</td>
<td>Business and Technology</td>
<td>3</td>
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<tr>
<td>Humanities or Social Science Gen Ed Requirement*</td>
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</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3</td>
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</table>

Total Program Credits: 60

* Students planning to transfer to a four year program should take MAT 127 and ECO 201/202.
This program prepares its graduates to become court interpreters. Fluency in both English and at least one other language is required for admission to the program. Students will develop their interpreting ability with courses that focus on consecutive interpreting, simultaneous interpreting, and sight translation. Students will also be prepared to enter the workforce as freelance interpreters by learning about how to succeed in the field of professional interpreting and translating. Ethical issues and the responsibilities of the interpreter are also taught.

Upon successful completion of all program requirements, graduates will be able to:
- Perform the three modes of spoken language interpretation, consecutive, simultaneous, and sight translation;
- Employ reference and research tools that enhance interpreting skills;
- Analyze roles that interpreters fill when performing in professional settings;
- Create a plan of how to build a home-based business in interpreting;
- Analyze networking, marketing, legal, and financial issues in the interpreting and translation industry.

AFTER UNION COUNTY COLLEGE

Graduates will be prepared to enter the workforce as freelance or court interpreters by learning about how to succeed in the field of professional interpreting and translating.

RECOMMENDED SEQUENCE

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
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<tr>
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<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
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<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td>Math, Science, Technology Gen Ed Requirement</td>
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<tr>
<td>INT 101</td>
<td>Interpreting I</td>
<td>3</td>
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<tr>
<td>TRN 101</td>
<td>Introduction to Written Translation</td>
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<td><strong>SPRING SEMESTER</strong></td>
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<td>INT 102</td>
<td>Interpreting II</td>
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<td>INT 105</td>
<td>The Role of the Interpreter</td>
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<td>ENG 128</td>
<td>The Dynamics of Communication</td>
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<td>Social Science Gen Ed requirement</td>
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<td><strong>Total Program Credits:</strong></td>
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</table>

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
This program is designed for transfer to a bachelor’s degree-granting institution. Coursework includes the practice of news writing and reporting for feature articles for various publications and the theory and practice of public relations including strategic planning, event planning, and promotions. Skills obtained include the ability to write and design for various publications. Students in this program can serve as the writers, editors, designers, and photographers for the College’s newspaper, The Scroll, and the College’s literary magazine, The Sheaf.

Upon successful completion of all program requirements, graduates will be able to:

- Discuss current social and political issues and events, both orally and in writing;
- Explain the effective creative practices in the areas of planning, writing, design, and photography;
- Communicate visually, orally, and in writing, the various components in print and digital production;
- Apply knowledge to identify, evaluate, and disseminate topics that are related to the fields of journalism and public relations by using a variety of information literacy techniques;
- Demonstrate proficiency with current productivity software applicable to the field of journalism and public relations.

Other Communications Degrees Include:
- Communications
- Media

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a four-year degree program and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

RECOMMENDED SEQUENCE

<table>
<thead>
<tr>
<th>YEAR</th>
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<th>COURSE #</th>
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<td>English Composition I</td>
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<td></td>
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<td>MAT 125</td>
<td>Survey of Special Topics in Mathematics</td>
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<tr>
<td></td>
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<td>MAT 127</td>
<td>Elementary Statistics</td>
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<td></td>
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<td>ENG 128</td>
<td>The Dynamics of Communication</td>
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<td>ENG 129</td>
<td>Public Speaking</td>
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<td>COM 102</td>
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<td>PSY 101</td>
<td>General Psychology</td>
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<td>COM 107</td>
<td>Publication Editing and Design</td>
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<td>COM 108</td>
<td>Principles and Practices of Public Relations</td>
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<td>COM 207</td>
<td>Advanced Publication Editing and Design</td>
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</table>
This program is designed as a foundation for Associate Degree study in Journalism and Public Relations, as well as an option for students who wish to enter the workforce in a shorter time than a traditional degree program takes to finish. Coursework includes the practice of news writing and reporting for various publications and the theory and practice of public relations including strategic planning, event planning, and promotions. Skills obtained include the ability to write and design for various publications. Students in this program can serve as writers, editors, designers, and photographers in print and digital media fields.

Upon successful completion of all program requirements, graduates will be able to:

- Analyze current social and political issues and events, both orally and in writing;
- Articulate visually, orally, and in writing, the various components of print and digital production;
- Demonstrate an advanced grasp of writing processes and techniques related to news reporting;
- Demonstrate the skills needed to evaluate and disseminate topics related to the field of public relations.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

AFTER UNION COUNTY COLLEGE

Graduates can work in the fields of journalism and/or public relations, or continue study in the field. They may also pursue a broader Communications degree here at Union County College.
Enter Union as a freshman, and then as a Junior to more than 50 Colleges & Universities

Union County College has dual admissions or transfer agreements with prestigious colleges and universities throughout the United States. Our agreements have been carefully structured to ensure qualified graduates admission as Juniors to over fifty four-year institutions.

As tuition at four-year colleges continues to rise, consider the economic advantage of spending your first two years at Union County College without sacrificing time or educational quality in your pursuit of a Bachelor’s Degree.

▲ More than 60 challenging programs of study
▲ Distinguished faculty
▲ Convenient local campuses
▲ Up-to-date technology
▲ Small class size
▲ Financial assistance

For information call 908-709-7518 – or – visit us online at www.ucc.edu
The Liberal Arts program is a flexible, transfer-oriented curriculum for students who want to complete a broad-based liberal arts foundation before majoring in a particular discipline. Traditionally, the Liberal Arts include language, philosophy, literature, history, and the physical sciences. The Liberal Arts program is designed to meet the core requirements of most four-year liberal arts colleges, offering a wide range of program options that allow for specialization during the first two years of college. Besides being a basis for many other programs, it is the center of several programs which serve as Liberal Arts options: American Studies, Early Childhood Elementary Education, Education, Graphic Design, Theater Arts, Psychology, Sociology, and Visual Arts. It is an ideal preparation for a well-rounded general education, allowing students to experience various academic disciplines before settling on a major after transfer.

Upon successful completion of all program requirements, graduates will be able to:

- Employ the creative process to find meaning in global, local, and personal challenges and concepts;
- Apply approaches from the liberal arts to expose the meaning of the human experience;
- Explain the ethical implications of everyday issues;
- Utilize the skills of reasoning and analysis to solve problems;
- Communicate clearly orally and in writing;
- Use critical thinking to apply historical and literary concepts to contemporary social and cultural issues;
- Apply technology skills for the purpose of learning and evaluating research.

AFTER UNION COUNTY COLLEGE
Graduates of this program receive a broad-based education that allows them to transfer to a four-year college or university and major in Literature, the Social Sciences, Mathematics, and the exact Sciences. For many professions, such as Teaching, Law, Government Service and Social Work, this background is essential.

MILESTONES
Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

FIRST YEAR

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<tr>
<th>COURSE#</th>
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<td>PSY 101 General Psychology</td>
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SECOND YEAR

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<td>ENG 128 The Dynamics of Communication</td>
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<td>OR</td>
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<tr>
<td>ENG 129 Public Speaking</td>
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<td>Math, Science &amp; Technology Gen Ed Requirement</td>
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<tr>
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<tr>
<td>Total Program Credits:</td>
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</table>

Electives in Liberal Arts – Choose a three-credit course from the following course alphas: ARB, AST, BIO, CHE, CHN, COM, ECO, ENG, FIA, FRE, GEO, GER, GYM, GOV, HIS, ITA, MAT, MTR, PHI, PHY, PSY, SOC, SPA.
The Liberal Studies Program is a flexible and broad-based general education curriculum providing students the opportunity to explore academic areas such as the social sciences, history, business, science, or the applied sciences. This Associate in Science degree will help enhance critical thinking, problem solving, and written communication skills, resulting in a well-rounded individual prepared either to enter the workforce or transfer to a baccalaureate degree granting institution. Students should select courses that are congruent with interests, transfer requirements, and career goals.

Upon successful completion of all program requirements, graduates will be able to:

- Use approaches from the social sciences to analyze the impact of human and social behaviors;
- Explain ethical implications of everyday issues;
- Utilize quantitative reasoning to solve problems;
- Communicate clearly orally and in writing;
- Use critical thinking to apply historical knowledge to contemporary social issues;
- Apply technological skills for the purpose of learning and research.

### AFTER UNION COUNTY COLLEGE

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

<table>
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<tr>
<th>RECOMMENDED SEQUENCE</th>
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<tr>
<td><strong>FIRST YEAR</strong></td>
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<tr>
<td><strong>Course</strong></td>
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<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
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<tr>
<td>History Gen Ed Requirement</td>
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<td>PSY 101</td>
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<td>ENG 102</td>
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<td>Lab Science Gen Ed Requirement</td>
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<td>Electives</td>
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<td><strong>Semester Total:</strong></td>
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<td><strong>SECOND YEAR</strong></td>
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<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>Math, Science &amp; Technology Gen Ed Requirement</td>
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<td>Elective Gen Ed Requirement</td>
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<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>Elective Gen Ed Requirement</td>
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<td>Electives</td>
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<tr>
<td><strong>Semester Total:</strong></td>
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<tr>
<td><strong>Total Program Credits:</strong></td>
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</tbody>
</table>
The Liberal Studies Certificate provides a foundation in general education and communication courses. The Liberal Studies Certificate program allows students to develop an individualized course of study appropriate to their specific educational goals. The program meets and exceeds the State-mandated general education distribution requirements for Certificate programs. The Certificate is awarded upon satisfactory completion of no fewer than 30 of work selected from the various disciplines of the College.

Upon successful completion of the certificate requirements, the graduate will be able to:

- Communicate clearly orally and in writing;
- Implement critical-thinking and problem-solving for the purpose of learning and research;
- Apply knowledge from the humanities and social sciences to cultural or political or social issues.

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps
Mathematics is both a science and an art. In our ever-changing world, mathematics is a constant at the root of analytical thinking. As the foundation for studies in science, technology, economics, and other disciplines, the demand for graduates with strong mathematical backgrounds is increasing. Whether to better grasp basic applications in our society, to come to understand the beauty and utility of mathematics in our natural world, to recognize its connections to the humanities, or to apply its intricate relationships in advanced technical fields, the study of mathematics develops one’s ability to think critically, reason logically and quantitatively, and appreciate the interconnectedness of the disciplines pragmatically.

This program assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:

- Formulate and evaluate possible solutions to problems, and select and defend the chosen solutions with mathematical proofs or by the scientific method as appropriate;
- Translate quantifiable problems into mathematical terms and solve these problems using mathematical or statistical operations;
- Construct graphs and charts, interpret them, and draw appropriate conclusions;
- Use technology in analyzing and solving mathematical problems;
- Address an information need by locating, evaluating, and effectively using information.

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a four-year college or university as a junior mathematics major leading to careers in statistics, actuarial sciences, mathematical modeling, cryptography, mathematics education, and research in mathematics. Consult with the STEM Division for details.

Mathematics is shown in bold in the recommended course sequence. Identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

MILESTONES

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

FIRST YEAR

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<td>ENG 101</td>
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<td>MAT 171</td>
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<tr>
<td>PHY 101</td>
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<td>PHYL 111</td>
<td>Mechanics Laboratory</td>
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<td>CST 161</td>
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<td>MAT 172</td>
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<td>PHY 102</td>
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SECOND YEAR

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<td>MAT 265</td>
<td>Linear Algebra</td>
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<td>MAT 271</td>
<td>Unified Calculus III</td>
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<td>CST 261</td>
<td>Data Structures</td>
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<td>MAT 248</td>
<td>Probability and Statistics</td>
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<td>MAT 267</td>
<td>Discrete Mathematics</td>
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<td>MAT 272</td>
<td>Differential Equations</td>
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<td>Social Science Gen Ed Requirement</td>
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</table>

Total Program Credits: 60

* The stated sequence of courses for the Mathematics program assumes that the student is math-ready for calculus.
** Students may substitute PHY 111 and PHY 201 if their transfer institution requires calculus-based physics courses. Please consult with the office of the Dean of STEM.
MATHEMATICS MAJOR EDUCATION OPTION

ASSOCIATE IN SCIENCE DEGREE

The nation’s growing need for scientists, engineers, and other technically skilled workers, has led to a shortfall in our national scientific and technical capabilities because U.S. colleges are not graduating enough scientific talent. Weaknesses in the K-12 education system contribute to challenges students face. In NJ, the shortage of qualified mathematics and science teachers is severe.

This option will provide a solid subject matter foundation and appreciation for mathematics for students planning to teach in order to assure quality in mathematics education. Union County College graduates will have the opportunity to matriculate at four-year colleges, pursuing a baccalaureate degree in Mathematics Education.

This program assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:
• Demonstrate critical thinking, analytical reasoning, and problem solving skills;
• Communicate mathematics effectively, applying its unique language and symbolic system;
• Apply mathematical theorems to solve classical problems and real-world applications;
• Formulate and evaluate possible solutions to problems, and select and defend the chosen solutions with mathematical proofs or by the scientific method as appropriate;
• Translate quantifiable problems into mathematical terms and solve these problems using mathematical or statistical operations;
• Construct graphs and charts, interpret them, and draw appropriate conclusions;
• Use technology in analyzing and solving mathematical problems;
• Address an information need by locating, evaluating, and effectively using information.

AFTER UNION COUNTY COLLEGE

Grads can transfer to a four-year college or university as a junior with a solid subject matter foundation to pursue a baccalaureate degree in Mathematics Education and Mathematics Teaching Certification. Consult with the STEM Division for details.

First Year

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>ENG 101 English Composition I</td>
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<tr>
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<td>MAT 171 Unified Calculus I*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHY 101 General Physics I</td>
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<td></td>
<td>PHYL 111 Mechanics Laboratory</td>
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<td>CST 161 Computer Programming Fundamentals</td>
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Semester Total: 15

| SPRING SEMESTER | ENG 102 English Composition II | 3  |
|                 | MAT 172 Unified Calculus II    | 4  |
|                 | PHY 102 General Physics II     | 3  |
|                 | PHYL102 General Physics II     | 1  |
|                 | CST 162 Computer Algorithms    | 4  |

Semester Total: 15

Second Year

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<tr>
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<td>HIS 101 Introduction to Western Civilization I</td>
<td>3</td>
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<tr>
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<td>PSY 101 General Psychology</td>
<td>3</td>
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<td>MAT 271 Unified Calculus III</td>
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<tr>
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<td>CST 261 Data Structures</td>
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Semester Total: 14

| SPRING SEMESTER | MAT 265 Linear Algebra            | 3   |
|                 | MAT 267 Discrete Mathematics      | 3   |
|                 | MAT 272 Differential Equations    | 4   |
|                 | HIS 102 Introduction to Western Civilization II | 3   |
|                 | PSY 206 Adolescent Psychology     | 3   |

Semester Total: 16

Total Program Credits: 60

* The stated sequence of courses for the Mathematics Major - Education Option program assumes that the student is math-ready for calculus.

This plan assumes the completion of all required developmental courses, prerequisites, co-requisites, and any other requirements as defined in the College Catalog.
Communications Option in Media includes three possible areas of focus: Audio, Film and Television, and Multimedia. This option is ideal for students who want to immerse themselves in the study of traditional and emerging media and gain skills necessary to pursue further study in the area of television, film, and audio production.

---

Upon successful completion of all program requirements, graduates will be able to:

- Apply classroom learning to the creation of student video projects and audio projects;
- Work effectively as a member of a team in their specific field;
- Demonstrate proficiency with productivity software such as word processing and presentation management applications and apply them to the field of communications;
- Discuss and analyze current social and political issues and events, both orally and in writing;
- Demonstrate in writing the skills necessary to research the history of media;
- Utilize technology encountered in a professional television studio, video production facility, or radio station;
- Apply technology skills for the purpose of learning and evaluating research related to media.

---

AFTER UNION COUNTY COLLEGE

Graduates may transfer to a bachelor's degree-granting institution to major in Media or various degree programs and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the to four-year colleges and universities in the country. See a transfer advisor for details.
The Biology degree program combines biology courses with coursework in Chemistry, Mathematics, and the Liberal Arts. The Medicinal Plant Chemistry option incorporates the biology curriculum with a generalist level knowledge of medicinal plant research, foundational knowledge of FDA, legal and policy issues, and an overview of the medicinal plant industry from the biological standpoint. This alternative provides exposure to the medicinal plant field and prepares students for transfer to baccalaureate degrees.

Upon successful completion of all program requirements, graduates will be able to:

- Explain the scientific method, including the reasoning process inherent in scientific inquiry, and the dynamic nature of scientific knowledge;
- Analyze biological data;
- Evaluate the impact of humankind and technology on the natural world and their ethical implications;
- Utilize critical thinking skills to understand and solve biological problems, differentiating scientific fact from opinion;
- Communicate the terminology, concepts, and principles of biology effectively in written, verbal, and electronic formats;
- Demonstrate competency in utilizing information technology to expand their current and future knowledge;
- Examine potential medical uses and pitfalls of medicinal plants.

AFTER UNION COUNTY COLLEGE

Graduates can take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
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SECOND YEAR

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<td></td>
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<td>MAT 172 Unified Calculus II</td>
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Students must complete all developmental English courses before taking any credit level Biology course.
Employment of healthcare occupations is projected to grow 18 percent from 2016 to 2026, much faster than the average for all occupations, adding about 2.4 million new jobs. Healthcare occupations are projected to add more jobs than any of the other occupational groups. This projected growth is mainly due to an aging population, leading to greater demand for healthcare services.

The median annual wage for healthcare practitioners and technical occupations (such as registered nurses, physicians and surgeons, and dental hygienists) was $68,190 in May 2019, which was higher than the median annual wage for all occupations in the economy of $39,810.

By virtue of an agreement between Union County College and the Trinitas School of Nursing, Elizabeth, New Jersey, and the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, Plainfield, N.J., the College confers the degree of Associate in Science upon graduates of the Nursing Schools who have fulfilled the requirements for the degree specified by the College and who have received a Diploma in Nursing from one of the Schools. Graduates of the Schools of Nursing are eligible to sit for the National Council Licensing Examination for registered nurse licensure.

Admission to the cooperative Nursing programs is selective and competitive. Individuals who are interested in one of the Nursing programs can apply to the Health Science program at Union County College and begin taking general education program requirements. Admission into the Health Science program does not guarantee admission into a Nursing program. Students with questions should contact the respective cooperative program admission’s office.

Students earn college credits in English, psychology, sociology, biology, chemistry, and humanities courses over the course of the programs in classes and laboratories conducted in the College. Nursing courses are conducted at the respective Schools of Nursing.

- **The College of Saint Elizabeth** offers an RN/BSN and BSN/MSN on site at Trinitas School of Nursing.
- **Nursing, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging** offers a day or evening Generic track in the nursing courses. The JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging also offers an Accelerated Track designed for individuals who have earned a baccalaureate or graduate degree in another discipline and wish to continue their studies in nursing. The nursing or clinical portion of the program is completed in one year by attending from January through December as a full-time day student. In addition, the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging also offers a Pathways to BSN Track in cooperation with Kean University.

Www.jfkmuhlenbergschools.org

Nursing graduates may sit for the NCLEX examination of the National Council of State Boards of Nursing, Inc. in order to become licensed Registered Nurses (R.N.).

Students are enrolled in the respective Schools of Nursing and are matriculated by the College. They are eligible to participate in all student activities at Union County College and they have the same rights and privileges as all other college students.

Graduates of the Cooperative Programs wishing to transfer into a Baccalaureate Nursing Program can expect that the basic program will be evaluated by the receiving institution and that transfer credits for selected courses taken in the Cooperative Programs are awarded at the discretion of the receiving institution. Articulation agreements with Kean University, Grand Canyon University, Chamberlain University, Walden University, Wilkes University, Monmouth University, Montclair State University, and Wagner College for B.S.N. education have been established.
Students interested in receiving additional information about, or an application to the program, should contact the Director of Admissions and Recruitment Services, JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, Park Avenue and Randolph Road, Plainfield, N.J., 07061, visit the school’s website https://www.jkmuhlenbergschools.org, email jkmuhlenbergadmissions@hackensackmeridian.org, or call 908-668-2401.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate accountability, responsibility, and integrity for the delivery of safe nursing care within legal, ethical, and regulatory framework in nursing practice;
- Provide safe nursing care utilizing evidence-based practice and the nursing process to minimize risk or harm to a diverse population across the lifespan;
- Provide education to individuals and families related to promotion, maintenance, restoration of health, and caring throughout the lifespan;
- Collaborate with interdisciplinary healthcare team members to facilitate optimal patient outcomes by incorporating quality initiatives in all settings;
- Demonstrate effective communication with patients, families, peers, and members of the interdisciplinary healthcare team to promote optimal patient outcomes in a variety of healthcare settings;
- Demonstrate sound clinical judgment and reasoning in the delivery of patient centered care for a diverse patient population;
- Utilize information technology to communicate, incorporate evidence-based practice, minimize errors, gather data, and support decisions for safe patient care.

### GENERAL INFORMATION

**CURRICULUM**
The School seeks to admit those candidates who are best qualified to meet the academic requirements of each of the School’s tracks. Fully accredited by the Accreditation Commission for Education in Nursing (ACEN) and the New Jersey State Board of Nursing, the nursing program offers two tracks leading to eligibility for registered nurse licensure, the National Council Licensure Exam for Registered Nursing, and prepares the student for entry-level nursing positions in hospitals or comparable facilities. The three curricular tracks are the Generic: Day and Evening track, the Accelerated track and the LPN transition track. Finally, the LPN to RN track, is offered once per year for those candidates who have a current LPN license and are interested in continuing their education to an RN.

**MATRICULATION**
Students may matriculate as full-time or part-time students in the Generic program.

Students enrolled in the Accelerated program must be enrolled as full-time students. A student who pursues a minimum of 12 credit hours of academic work per semester is classified as full-time. Part-time status is any student who pursues less than 12 credit hours of academic work over semester.

**GENERIC RN PROGRAM**
The Generic Track is a 75-credit curriculum and students have the option of day or evening classes. Students are admitted for both the Fall and Spring semesters. There are no summer nursing classes offered in the Generic Track. Students have a maximum of seven (7) semesters to complete the program whether they are full-time or part-time.

General education courses, sciences and humanities are completed at UCC. Transfer credits may be accepted into the program. Nursing courses are taken at the School of Nursing in the Plainfield campus.

**ACCELERATED PROGRAM**
The Accelerated Track builds on existing knowledge and life experience. It is designed for individuals with a bachelor’s level degree (or higher) who wish to change career goals without repetition of college courses. They must also earn a specified score on the School’s entrance examination for consideration into this track. All general education (pre-clinical) requirements must be satisfied either through transfer and/or enrollment in the nursing program before beginning this program. When matriculating into the Accelerated Track, students attend day classes for one calendar year, January through December, including the summer.

**LPN TO RN TRACK FOR LICENSED PRACTICAL NURSES**
The LPN to RN Track is designed for the licensed practical nurse (LPN) who wishes to continue studies to be eligible to sit for the registered nurse licensure examination (NCLEX-RN). The Track builds on existing knowledge, skills and strengths. Upon matriculation into this track, students must attend the LPN Transition Course (NURM 120). This annual, five-week course begins at the end of May and finishes in June. Upon successful completion of the LPN to RN Track and the required pre-requisite and co-requisite courses, students will be eligible to enter the School of Nursing in the third nursing course (NURM 221).

**EDUCATION PROGRESSION: PATHWAYS TO THE BSN**
Students may opt to apply for the Pathways to BSN program. The ‘Pathways’ provides an opportunity for those candidates who meet the admissions criteria to complete their BSN degree at Kean University after graduation from the SON.

The SON also has agreements with Wagner College, Chamberlain University, Grand Canyon University, Montmouth University, Montclair University, Rutgers, and Walden University.

### MILESTONES

*Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.*

**Career and Transfer Information**
www.ucc.edu/academicmaps
NURSING

JFK MUHLENBERG HAROLD B. AND DOROTHY A. SYNDER SCHOOLS OF NURSING AND MEDICAL IMAGING
ASSOCIATE IN SCIENCE DEGREE, cont’d

GRADUATES OF THE PROGRAM
Graduates of the program are eligible to take the National Council of State Boards of Nursing Licensing examination (NCLEXRN) to obtain licensure as a Registered Nurse. Upon licensure, graduates may seek employment in the nursing/health care field and/or continue their educational pursuits.

ADMISSION TO THE SCHOOL OF NURSING
Admission is selective and competitive. Individuals must apply during the Open Admissions dates. Interested individuals should visit the Schools’ website www.jfkmuhlenbergschools.org for information about the Schools and required policies and procedures.

ADMISSION TO THE GENERIC TRACK
Application for admission consideration for the Generic Track requires the following:

- Must have a cumulative GPA of 2.5 or higher in relevant courses.
- TEAS Entrance Exam scores of 58% or higher in Math and Reading.
- General education courses not need to be taken prior to applying to the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging.
- One may transfer up to 36 comparable credits (40 for those with a bachelor’s degree) into the program, no grade lower than C is considered for transfer.

ADMISSION TO THE ACCELERATED TRACK
Application for admission consideration for the Accelerated Track requires the following:

- Requires a Baccalaureate, or higher Degree.
- Must have a cumulative GPA of 2.7 or higher in relevant courses.
- TEAS Entrance Exam scores of 70% or higher in Math and Reading.
- Successful completion of all general education courses are required prior to applying to the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging.
- One may transfer up to 40 comparable credits into the program, no grade lower than C is considered for transfer.

RECOMMENDED SEQUENCE – DAY AND EVENING DIVISIONS

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<td>FALL SEMESTER</td>
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<tr>
<td>BIO 105</td>
<td>Anatomy and Physiology I*</td>
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<tr>
<td>CHE 114</td>
<td>Principles of Organic Chemistry and Biochemistry**</td>
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<td>NURM 119</td>
<td>Introduction to Nursing</td>
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<tr>
<td>BIO 106</td>
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<td>PSY 101</td>
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<td>PSY 204</td>
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<td>NURM 122</td>
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ACCELERATED TRACK

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* These sciences must have been taken within the last five years to be transferable.
** The CHE 113/CHE 114 sequence is recommended for students considering BSN/MSN study.
+ Taught in a 12-week summer semester.
NURSING

JFK MUEHLENBERG HAROLD B. AND DOROTHY A. SNYDER SCHOOLS
OF NURSING AND MEDICAL IMAGING
ASSOCIATE IN SCIENCE DEGREE

ADMISSION TO THE LPN TO RN TRACK

Application for admission consideration for the LPN to RN Track requires the following:

- Current LPN license from any state or territory of the United States.
- Must have a cumulative GPA of 2.5 or higher in the relevant courses.
- TEAS Entrance Exam scores of 58% or higher in Math and Reading.
- General education courses not need to be taken prior to applying to the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging. However, successful completion of all general education courses are required prior to starting the transition course.
- One may transfer up to 36 comparable credits (40 for those with a bachelor’s degree), into the program, no grade lower than C is considered for transfer.

RECOMMENDED SEQUENCE
LPN TO RN TRACK

COURSES AT UNION COUNTY COLLEGE (IF NECESSARY)

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Total Credits: 31

SUMMER SEMESTER

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Semester Total: 4

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Semester Total: 12

SPRING SEMESTER

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Semester Total: 12

Nursing Credits: 38
General Education Credits: 37
Total Program Credits: 75

* Transfer limits:
  BIO sciences must have been taken within the last five years
  CHE sciences must have been taken within the last ten years

** Upon passing NURM 120, 16 transfer credits will be awarded to satisfy the following courses:
  NURM 100
  NURM 119
  NURM 121
  NURM 122
Students interested in receiving additional information about the Trinitas School of Nursing or receiving an application should contact Union County College. The Cranford campus number is 908-709-7500; the Elizabeth campus number is 908-965-6050 or email nursing@ucc.edu. Additional information is also available at www.trinitasschoolofnursing.org.

Trinitas School of Nursing End of Program Student Learning Outcomes

The Graduate will:

- Provide compassionate and coordinated patient centered care recognizing the patient as the source of control and as a full care partner with respect to their individual preferences, values and needs.
- Function effectively within nursing and interprofessional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Integrate best current evidence with clinical expertise and patient/family preferences and values when making clinical decisions in the delivery of optimal health care.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems. Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision making.

GENERAL INFORMATION

CURRICULUM:

Fully accredited by the Accreditation Commission for Education in Nursing (ACEN) and the New Jersey State Board of Nursing, the program offers a basic course of study in nursing. The curriculum provides a sound theoretical base of knowledge in nursing, biological, behavioral and social sciences and integrates this knowledge into academic and practical experiences within the health and illness continuum of patient care. Utilization of a variety of health care agencies facilitates the application of all aspects of the students’ learning. The curriculum has two program tracks (Generic RN or LPN to RN) for prospective students to consider.

MATRICULATION:

Students may matriculate as full-time or part-time students in the Generic RN or LPN to RN tracks. A student who pursues a minimum of 12 credit hours of academic work per semester is classified as full-time. A student who pursues less than 12 credit hours of academic work per semester is classified as part-time.

Generic students have a maximum of 7 semesters to complete the nursing program from the time of acceptance and three and one half years from the time they enroll in NURE 130. LPN to RN students have a maximum of 6 semesters to complete the program from the time they enroll in NURE 211/212.

GENERIC RN PROGRAM:

The Generic RN track of the School of Nursing is offered with day, evening, and select weekend classes. The admission process for this track is done twice a year for the Fall and Spring semesters.

General education, science, and humanities courses may be taken at the Elizabeth, Plainfield or Cranford campuses of Union County College while nursing courses are offered at the School of Nursing on the Elizabeth campus. Transfer credits are also accepted. Students are expected to complete the Generic RN track within federal time guidelines.

LPN TO RN TRACK FOR LICENSED PRACTICAL NURSES

The LPN to RN track is offered with evening and select weekend classes. Admission to this track is done on an annual basis for each Fall semester.

The LPN to RN track is specifically designed for Licensed Practical Nurses who wish to further their nursing education within a realistic time frame. Custom designed courses build on existing knowledge, skills, and strengths and provide an opportunity to pursue career goals without undue repetition of previous learning. Students are expected to complete the LPN-RN track within federal time guidelines.

Education Progression:

RN-BSN/MSN

Seamless academic progression to the BSN and MSN degree is available to Trinitas graduates. St. Elizabeth University offers both a Bachelor of Science in Nursing and a Master of Science in Nursing program onsite at Trinitas. Trinitas School of Nursing also has a dual admissions agreement with Kean University for the BSN program, and articulation agreements with Drexel University and Thomas Edison State University for obtaining the RN-BSN degree.

GRADUATES OF THE PROGRAM

Graduates of the program are eligible to take the National Council of State Boards of Nursing Licensing Examination (NCLEX-RN) to obtain licensure as a Registered Nurse. Upon licensure, graduates may seek employment in the nursing/health care field or continue their educational pursuits.
ADMISSION TO THE SCHOOL OF NURSING

Individuals who are interested in the Trinitas School of Nursing Cooperative Program can apply to the Health Science program upon enrollment at Union County College until they receive formal acceptance into one of the School of Nursing’s program tracks: the generic track or the LPN to RN track. Admission to the nursing program is selective and competitive.

NOTE: Prospective applicants with two or more nursing course failures at another college or nursing school will not be considered for admission to the Trinitas School of Nursing.

Admission to NURE 130 (Generic RN Track)

Application for admission consideration for NURE 130 requires the following:

• Attendance at a Trinitas Nursing Information Session.
• A minimum cumulative score of 55% on the ATI TEAS Admission Exam.
• Successful completion of MAT017 and ENG097 or placement into College level courses.
• Cumulative GPA of 2.5 or higher (High school GPA within one year of graduation or Union County College GPA).
• Successful completion or current registration in the NURE 130 co-requisite courses (Note: all science courses require a minimum grade of C).
• The quality points used in acceptance into the program are derived only from UCC courses that are part of the required Trinitas School of Nursing curriculum.

Admission to NURE 211/212 (LPN to RN Track)

Application for admission consideration for the LPN to RN track requires the following:

• Current LPN license from any state or territory of the United States.
• Attendance at a Trinitas School of Nursing Information Session.
• A minimum cumulative score of 55% on the ATI TEAS Admission Exam.
• Successful completion of MAT017 and ENG097 or placement into College level courses.
• Union County College GPA of 2.5 or higher.
• Successful completion of all LPN to RN track pre-requisite courses (all science courses require a minimum grade of C).
• A clear or negative criminal background check and negative urine drug screen.
• The quality points used in acceptance into the program are derived only from UCC courses that are part of the required Trinitas School of Nursing curriculum.

Additional Nursing Program Requirements

All nursing students are required to meet additional mandatory requirements prior to enrollment in clinical nursing courses (Generic Track - NURE 131; LPN-RN Track - NURE 212).

All students are required to maintain a minimum GPA of 2.5 while enrolled in nursing courses.

For additional information on the Trinitas School of Nursing, please visit the website at www.trinitasschoolofnursing.org or email trinitas@ucc.edu.

PROGRAMS OF STUDY

NURSING, TRINITAS SCHOOL OF NURSING

ASSOCIATE IN SCIENCE DEGREE, cont’d

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENT ENROLLMENT*

GENERIC CURRICULUM

DAY AND EVENING DIVISIONS

NURE 130, NURE 131, NURE 132, NURE 231, and NURE 232 are offered during the Fall and Spring semesters.

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
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</tr>
<tr>
<td>BIO 105</td>
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<tr>
<td>CHE 114</td>
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<tr>
<td>PSY 101</td>
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<td>BIO 106</td>
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<tr>
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<td>BIO 108</td>
<td>Microbiology</td>
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Credit Allocation: Nursing Credits: 36
General Education Credits: 37
Total Program Credits: 73

A total of 73 credits for a professional nursing program is within the standard of professional nursing programs. In NJ the range of total credits for Associate Degree and Diploma programs is 65-75 credits.
Due to the rigorous nature of nursing curriculum courses, it is recommended that if the full-time sequence of courses is chosen, students limit outside work obligations to support student success in the program.

RECOMMENDED SEQUENCE

LPN TO RN CURRICULUM

RN COMPLETION PROGRAM FOR LPNS:
NURE courses are offered in the evening in this division.

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<thead>
<tr>
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FALL SEMESTER

NURE 211 Bridge-to-Professional Nursing Core Concepts  3
NURE 212 Health and Physical Assessment               4

SPRING SEMESTER

NURE 250 Nursing Care of the Client with a Medical Surgical Health Deviation  6

SUMMER SESSION

NURE 260 Nursing Care of Children and their Families  3
NURE 270 Nursing Care of Women and the Childbearing Family  3

FALL SEMESTER

NURE 280 Nursing Care of the Client with Mental Illness  3
NURE 290 Nursing Care of the Client with Complex Multi-System Medical/Surgical Health Deviation  3
NURE 291 Leadership and Management Seminar            1

Credit Allocation: Nursing Credits: 36
General Education Credits: 37
Total Program Credits: 73

AFTER UNION COUNTY COLLEGE

Graduates of these programs can either work in the Nursing/Health professions or continue their educational pursuits.
The paralegal studies program at Union County College is designed to prepare graduates for a variety of paralegal job opportunities. The utilization of paralegals improves the efficiency, economy and availability of legal services. A paralegal performs work under the direct supervision of an attorney.

Paralegals may not provide legal services directly to the public, except as permitted by law.

The Associate in Science Degree Option will prepare students to enter the paralegal work force with the requisite skills or to transfer to a four-year institution to complete their baccalaureate degree.

Upon successful completion of all program requirements, graduates will be able to:

- Perform factual research incorporating computer technology;
- Prepare forms, pleadings, legal instruments, and litigation documents;
- Identify, analyze and evaluate legal issues;
- Write clearly and accurately according to the standards of the legal profession;
- Perform legal research using library resources and computer technology.

Transfer Policy: Prospective students may transfer no more than 30 credits, and no more than 12 credits of legal specialty courses into the Associate in Science degree program, and only with the approval of the Social Sciences, Business, and History Division.

### AFTER UNION COUNTY COLLEGE

This program is designed to prepare the graduate to enter the workforce as a paralegal working under the supervision of a lawyer or to transfer to a four-year institution to complete a baccalaureate degree.

### RECOMMENDED SEQUENCE

#### FIRST YEAR

<table>
<thead>
<tr>
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#### SECOND YEAR

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<td>OR</td>
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<td>GOV 202</td>
<td>American National Government</td>
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<td>LGL 220</td>
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<td>LGL Elective*</td>
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<td>LGL 215</td>
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<td>LGL 221</td>
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<td>OR</td>
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<td>ECO 202</td>
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Total Program Credits: 60

*Legal Electives:

- LGL 210 - Tort Law
- LGL 230 - Family Law
- LGL 231 - Criminal Law
- LGL 235 - Wills, Estates & Trusts
- LGL 250 - Bankruptcy Law
- LGL 260 - Employment Law
- LGL 270 - Immigration Law
- LGL 290 - Paralegal Internship
The paralegal studies program at Union County College is designed to prepare graduates for a variety of paralegal job opportunities. The utilization of paralegals improves the efficiency, economy and availability of legal services. A paralegal performs work under the direct supervision of an attorney.

Paralegals may not provide legal services directly to the public, except as permitted by law.

The Certificate of Achievement Program Option will prepare students who have already earned a college degree to work as paralegals.

Upon successful completion of all program requirements, graduates will be able to:

- Identify, analyze and evaluate legal issues;
- Perform legal research using library resources and computer technology;
- Perform factual research incorporating computer technology;
- Write clearly and accurately according to the standards of the legal profession;
- Prepare forms, pleadings, legal instruments, and litigation documents.

Transfer Policy: Prospective students may transfer no more than 9 credits of legal specialty courses into the Certificate of Achievement program, and only with the approval of the Social Sciences, Business, and History Division.

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
This program is intended for students who are interested in helping and treating patients to achieve the highest level of care outside of the hospital. Prospective students should have an interest in the pathophysiology of disease, mathematic competence, and should be able to function effectively in a dynamic work environment.

Paramedics must be confident leaders who can accept the challenge and high degree of responsibility that is required for the position. They must have excellent judgment and be able to prioritize decisions and act quickly in the best interest of the patient. In addition, paramedics must be self-disciplined, utilize communication skills to develop rapport with patients/significant others from diverse ages and cultural groups, and function independently at an optimum level in a nonstructured, changing environment.

The Union County College Paramedic Emergency Health Science Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
1361 Park Street
Clearwater, FL 33756
727-210-2350
www.caahep.org

To contact CoAEMSP:
8301 Lakeview Parkway
Suite 111-312
Rowlett, TX 75088
214-703-8445
Fax: 214-703-8992
www.coaemsp.org

Scot Phelps
Paramedic Program Director
Plainfield Campus
scot.phelps@ucc.edu
Phone: 908-412-3551

Prospective students must meet the following requirements to be accepted into the degree program:

- Have a current New Jersey EMT and Health Care Provider CPR certification.
- Have a New Jersey Driver’s License with clean record.
- Obtain the age of 18 by the first day of Paramedic I.

PMD course enrollment requires:

- Completion of all remedial math and English course.
- Two (2) applications for acceptance into the Paramedic Degree Program. The first application is submitted to the College. The second application is submitted to the Paramedic Program for acceptance into the program.
- Attendance at orientation is mandatory.
- Students are required to submit a clear criminal background check, demonstration of vaccination status, proof of a two-step PPD skin test, and a clean 5-panel drug screen result at the time of the orientation. The fees associated with these tests are paid by the student.
- There is a Paramedic Student Handbook which has policies and procedures that are specific to the program because of State and/or National mandates.
Advanced Placement in Paramedic: There is a process in place for advanced placement for currently certified New Jersey Paramedics in good standing to obtain their Associate Degree in Applied Sciences. Applicants for Advanced Placement may contact the program director for more information. Prospective students must provide copies of college transcripts indicating paramedic coursework, current NJ paramedic certification, current CPR, ACLS, PALS, and PHTLS certifications. Up to 38 credits may be awarded for prior PMD coursework with these current certifications. Required courses include PMD 214 - Paramedic Clinical III, offered during the Fall semester, worth 5 credits, and all general education coursework required in the program.

Transfer of Credits
Transfer credits will be considered for general education courses based upon the New Jersey transfer guidelines. Program specific courses will not be accepted for transfer credit.

Credits for Experiential Learning
Applicants requesting credits for experiential learning for general education courses will be considered on a case-by-case basis.

The program has the following goal(s) defining minimum expectations for graduates:
- To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency First Responder levels.

AFTER UNION COUNTY COLLEGE

Graduates of the program will obtain national and New Jersey Paramedic Certification making them eligible for a Paramedic service nationally. Graduates can transfer to a four-year institution for continuation in a bachelor’s degree program.

RECOMMENDED SEQUENCE
Prior to enrollment in the Paramedic Program, students need to have completed all developmental course work in English and Math.

Students are encouraged to complete all of the general education courses prior to enrollment, as the Paramedic Program is rigorous and time-intensive curriculum. Anatomy and Physiology I (BIO 105) is a mandatory prerequisite of Paramedic I. Anatomy and Physiology II (BIO 106) is a mandatory co-requisite of Paramedic I.

FIRST YEAR

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<td>ENG 101</td>
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<td>MAT 113</td>
<td>Math Applications                  3</td>
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TOTAL PROGRAM CREDITS: 63

SECOND YEAR

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TOTAL PROGRAM CREDITS: 63
PHOTOVOLTAIC (PV) CERTIFICATE

The PV certificate provides the academic, technical and hands on experience to prepare the student for entry into the workforce and further on the job-training in PV industry related job functions. These include Solar Photovoltaic Installer¹, PV Site Auditor, and PV Commissioning.

The PV certificate also contributes to the furthering of academic growth beyond the certificate level by providing 20 credits of transfer towards an AAS in either Construction Engineering Technology or Electronics/Electromechanical Engineering Technology.


Upon successful completion of all program requirements, graduates will be able to:

- Develop strategies for the installation, maintenance, repair and operation of PV systems;
- Define basic construction methods and building materials’ properties including structural steel, concrete and wood;
- Perform laboratory procedures and assess the validity of experimental/diagnostic data;
- Employ critical thinking and problem solving skills to analyze, predict the behavior of, and synthesize PV systems and subsystems with minimal supervision;
- Express and interpret both technical and non-technical concepts orally, in written, and electronic formats;
- Demonstrate information literacy through the ability to evaluate, review and interpret technical documents related to current technical advances and innovations in the PV industry.

FIRST YEAR

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<tr>
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<tr>
<td>Semester Total:</td>
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<td>7</td>
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</tbody>
</table>

Total Program Credits: 30

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
The Physical Therapist Assistant Program is a 69-credit Associate in Applied Science degree program accredited by the Commission on Accreditation in Physical Therapy Education. It is designed to prepare individuals for employment in physical therapy settings under the supervision of a Physical Therapist. Graduates are eligible to take the national licensure examination necessary for practice as a licensed Physical Therapist Assistant (PTA).

Course work prepares the student to perform basic physical therapy procedures and should not be considered as a direct vehicle of study towards an entry-level physical therapy academic program. The program demands that students attend classes full-time during the day. Hours for clinical practice may vary and travel to the clinical setting is the responsibility of the student.

Specific goals of the program:
- To prepare individuals for employment in physical therapy settings under the supervision of a physical therapist.
- To work under the supervision of a physical therapist in an ethical, legal, safe and effective manner.
- To provide, in addition to general education and basic science courses, a combination of didactic and clinical learning experiences offered in an integrated and sequential manner to assure entry level proficiency.

Upon successful completion of all program requirements, graduates will be able to:
- Demonstrate the ability to deliver safe, appropriate and effective interventions to the populations they serve under the direction and supervision of a physical therapist within the scope of PTA practice;
- Demonstrate the ability to communicate appropriately, and educate the populations they serve;
- Contribute to the continuous improvement of the profession by actively pursuing career development activities;
- Utilize human, fiscal and system resources appropriately to provide efficient and ethical physical therapy service;
- Demonstrate professionalism, accountability, integrity and cultural competence in all duties associated with being a physical therapist assistant.

All students must complete a PTA Program Admission Form prior to starting the program. Admission information can be found on the program website.

**Recommended Sequence**

### Pre-Clinical Phase

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition I*</td>
<td>3</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Anatomy and Physiology I*</td>
<td>4</td>
</tr>
<tr>
<td>MAT 119</td>
<td>Algebra*</td>
<td>3</td>
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<td>PSY 101</td>
<td>General Psychology*</td>
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</tr>
<tr>
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### Clinical Phase

#### Spring Semester

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
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</tr>
<tr>
<td>PTA 115</td>
<td>Functional Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>PTA 130</td>
<td>Physical Therapy Procedures I</td>
<td>6</td>
</tr>
<tr>
<td>PTA 251</td>
<td>Independent Living</td>
<td>2</td>
</tr>
<tr>
<td>PSY 204</td>
<td>Lifespan Development*</td>
<td>3</td>
</tr>
<tr>
<td>PSY 212</td>
<td>Psychology of Adulthood and Aging*</td>
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#### Summer Session I

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<td>PTA 140</td>
<td>Physical Therapy Procedures II</td>
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#### Summer Session II

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<tr>
<td>BIO 106</td>
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#### Fall Semester

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<th>Cr.</th>
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<tbody>
<tr>
<td>PTA 217</td>
<td>Clinical Seminar and Practice I</td>
<td>7</td>
</tr>
<tr>
<td>PTA 220</td>
<td>Physical Therapy Procedures III</td>
<td>6</td>
</tr>
<tr>
<td>PTA 221</td>
<td>Physical Therapy Procedures IV</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Semester Total:</td>
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</table>

#### Spring Semester

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 223</td>
<td>Clinical Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PTA 224</td>
<td>Clinical Practice II</td>
<td>12</td>
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<tr>
<td></td>
<td>Semester Total:</td>
<td>14</td>
</tr>
</tbody>
</table>

Total Program Credits (including all prerequisite course work): 69

* Prerequisite (pre-clinical phase) course work must be passed with a grade of “C” or higher.

All course work in the clinical phase of the PTA program must be passed with a grade of “C+” or better.

**After Union County College**

Graduates are eligible to take the Licensure Examination necessary for practice as a Licensed Physical Therapist Assistant.
The Practical Nursing Program at Union County College is a four-semester program leading to a Certificate. Nursing courses may be offered during the day, evening and/or weekend. College courses may be taken during the day, evening, weekend hours or as distance education, as available. For all students, clinical rotations may be scheduled during the day, evening, and/or weekend hours in order to obtain optimum patient care experiences.

The curriculum incorporates theoretical knowledge from the biological and social sciences into the nursing framework. Students are able to apply information acquired in the classroom and skills laboratory to clinical patient care experiences.

Graduates of this program are eligible to take the NCLEX-PN examination for Practical Nurse licensure. Licensed Practical Nurses provide patient care in a variety of health care agencies under the direction of a Registered Nurse, and/or physician or dentist.

Prospective students in the Practical Nursing program are required to have the following:

- A passing score on the admission Test of Essential Academic Skills (TEAS) or a GPA of greater than a 3.0
- Criminal background check clearance
- CPR certification for the healthcare provider
- Malpractice insurance
- Completed health records
- Official uniform

Additional information about program enrollment, policies, and courses is available at: https://www.ucc.edu/academics/academic-divisions/division-of-allied-sciences/practical-nursing-program/

**CURRICULUM OUTCOMES**

Upon successful completion of all program requirements, graduates will be able to:

- Provide holistic care to patients from diverse multi-cultural backgrounds, experiencing a variety of self-care needs, within the context of the nursing process;
- Collaborate with other members of the health care team; Demonstrate accountability by practicing nursing within a legal and ethical framework;
- Use effective verbal and written communication skills when interacting with patients, families, and other members of the health care team;
- Assume accountability for personal and professional growth;
- Apply clinical reasoning in interactions with patients, families, and other members of the health care team;
- Incorporate contemporary knowledge and tools from nursing and the biological and social sciences into the care provided to patients at different developmental levels throughout the life span.

**Criminal History Background Check**

All students enrolled in the Practical Nursing program are required to have a clear criminal history background check to participate in clinical care experiences. The background check is mandated by all clinical agencies and must be completed prior to enrollment in PNU 190. Eligible students will be provided with information regarding the approved vendor for this service. Please be aware that any history of criminal activity may prevent participation in clinical experiences at clinical affiliating agencies.

It is the students’ responsibility to notify the nursing program of any change in their criminal status.

**Accreditation**

The Practical Nursing Program at Union County College received accreditation on October 2015 through October 2023, from the New Jersey Board of Nursing. The Board may be contacted at:

New Jersey Board of Nursing
124 Halsey Street, PO Box 45010
Newark, NJ 07101
(973) 504-6430
https://www.njconsumeraffairs.gov/nur

Applicants may contact the Board of Nursing with inquiries regarding the nursing program.

**MILESTONES**

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

**Career and Transfer Information**

www.ucc.edu/academicmaps
In the event that a students’ concerns are not perceived to have been resolved through the grievance process within the College, then students may address complaints about the Program to the Board of Nursing at the address above.

The program is also accredited by the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) effective 2019-2025. This is a voluntary accreditation that recognizes the program’s “ability to meet or exceed standards and criteria for educational quality”.

NLN-CNEA- the National League for Nursing Commission for Nursing Education Accreditation
2600 Virginia Avenue
Washington, DC 20037
202-909-2526
www.nln.org

AFTER UNION COUNTY COLLEGE

Graduates of this program are eligible to take the NCLEX-PN examination for Practical Nurse Licensure. Articulation with RN programs is available for graduates who wish to continue their nursing education.

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL/SPRING SEMESTER</td>
<td></td>
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</tr>
<tr>
<td>EN 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3 OR</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Psychology of Personality</td>
<td>3</td>
</tr>
<tr>
<td>BIO 102</td>
<td>Human Biology*</td>
<td>4</td>
</tr>
<tr>
<td>PNU 190</td>
<td>Nursing Concepts</td>
<td>5</td>
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<td>Semester Total:</td>
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<td>SPRING/SUMMER SEMESTER</td>
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<tr>
<td>PNU 191</td>
<td>Adult Health I</td>
<td>10</td>
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<td>Free Elective</td>
<td>3-4</td>
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<td></td>
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</table>

SECOND YEAR

| SUMMER/FALL SEMESTER |                        |     |
| PSY 204  | Lifespan Development          | 3   |
| OR      |                                   |     |
| PSY 205  | Child Psychology               | 3   |
| PNU 210  | Maternal/Child, Pediatric, and Mental Health Nursing | 9 |
| Semester Total: |                                 | 12  |
| FALL/SPRING SEMESTER |                        |     |
| PNU 211  | Adult Health II & Role Transition | 12 |
| Semester Total: |                                 | 12  |

Total Program Credits: 52-53

* BIO 105 and BIO 106 may be substituted for BIO 102

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
Be Part of American Honors.

American Honors is a competitive, highly selective honors program that provides high achieving community college graduates with an affordable pathway to complete their bachelor’s degree at some of the top four-year universities in the country.

The American Honors program at Union County College provides students of high motivation and ability with a top-tier curriculum at a fraction of the typical cost of an equivalent education. In addition to its financial benefits, the program promotes strong connections between students who challenge and support each other inside and outside of the classroom. Leadership opportunities and community outreach are hallmarks of the program. Students engage in rigorous coursework, based on National Collegiate Honors Council standards, in small learning communities that promote an interactive, dynamic, and engaging experience guided by highly qualified Union County College faculty who are experts in their field.

This program is for students who plan to transfer after completing their two-year degree at Union County College. Students must apply to both Union County College and the American Honors program. Honors courses are offered in core areas and fulfill general education requirements to ensure transferability. Students who complete their A.A. and A.S. degrees will graduate with the American Honors designation added to their Union County College degree if they fully complete the program requirements. Student will need to take a minimum of 12 Honors credits and maintain a GPA of 3.25 or higher to qualify for this designation. To learn more about the American Honors program at Union, go to https://www.ucc.edu/academics/american-honors/ or contact honors@ucc.edu.
Psychology is the scientific study of behavior and mental processes. This program is for those students who wish to transfer to a four-year institution and major in Psychology.

Upon successful completion of all program requirements, graduates will be able to:

- Relate psychological principles to personal, social, and organizational issues;
- Evaluate evidence and ethical issues relating to psychology;
- Examine the complexity of sociocultural and global diversity;
- Analyze major concepts, theoretical perspectives, empirical findings, and historical trends in psychology;
- Apply basic research methods in psychology, including research design, data analysis, and interpretation;
- Solve problems related to behavior and mental processes by utilizing critical and creative thinking, skeptical inquiry, and the scientific approach;
- Illustrate information literacy by utilizing multiple media sources and technology, and by communicating effectively in a variety of formats.

AFTER UNION COUNTY COLLEGE

Grads can transfer to a four-year degree program majoring in the Social Sciences or Liberal Arts, or other areas of interest and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Modern Language Gen Ed Requirement</td>
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<td></td>
</tr>
<tr>
<td>History Gen Ed Requirement</td>
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<td></td>
</tr>
<tr>
<td><strong>Math, Science, &amp; Technology Gen Ed Requirement</strong></td>
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</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
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<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
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<tr>
<td>Modern Language Gen Ed Requirement</td>
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<tr>
<td>History Gen Ed Requirement</td>
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<tr>
<td><strong>Math Gen Ed Requirement</strong></td>
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</tr>
<tr>
<td>PSY 102</td>
<td>Psychology of Personality</td>
<td>3</td>
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<tr>
<td><strong>Semester Total:</strong></td>
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SECOND YEAR

<table>
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<tr>
<th>COURSE#</th>
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<th>Cr.</th>
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<tr>
<td><strong>FALL SEMESTER</strong></td>
<td></td>
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<tr>
<td>ENG 128</td>
<td>The Dynamics of Communication</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 129</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td><strong>Lab Science Gen Ed Requirement</strong></td>
<td>4</td>
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<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
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<tr>
<td>Social Science Gen Ed Requirement</td>
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<td>PSY 200-Level Course</td>
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<td><strong>SPRING SEMESTER</strong></td>
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<tr>
<td>PSY 213</td>
<td>(SOC 213) Social Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 200-Level Course</td>
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<td></td>
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<tr>
<td>Humanities Gen Ed Requirement</td>
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<tr>
<td>Diversity Gen Ed Requirement</td>
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<td><strong>Semester Total:</strong></td>
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<tr>
<td><strong>Total Program Credits:</strong></td>
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Math, Science & Technology Gen Ed Requirement 4 credit hours: MAT 125 Recommended
Math Gen Ed Requirement 4 credit hours: MAT 127 Recommended
Social Science Gen Ed Requirement: SOC 101 Recommended
Any Gen Ed Diversity Requirement: SOC 206 Recommended
Psycosocial rehabilitation (PSR) is a comprehensive treatment strategy for meeting the needs of people with severe mental illnesses. PSR practitioners assist people in obtaining the skills, support and resources they need to achieve success and satisfaction in their social, vocational, educational and independent living environments. The overall goals of this field are promotion of recovery, community integration, and improved quality of life for people coping with psychiatric disabilities. There are ample career opportunities for PSR practitioners in a variety of rehabilitation programs and community mental health settings. The knowledge and skills of the PSR practitioner qualify him/her to provide supportive advising, case management services, and vocational rehabilitation interventions. The practitioner is also prepared to facilitate skills training groups as well as psycho-education and support groups.

Rutgers’ SHRPs Program

The Rutgers School of Health Related Professions had the first undergraduate degree-granting program in this field in New Jersey. It is one of the few model programs of this type throughout the nation. Students in this program will complete two clinical placements at sites such as Rutgers-UBHC, Bridgeway, Collaborative Support Programs of NJ, Project Live, and others.

Degree Requirements:

Requirements for admission to the Union County College general education phase of the program are: High School graduation or equivalent diploma (GED); English as a

Second Language (ESL) placement test if required and completion of ESL courses if necessary; and completion of any necessary remedial courses.

To qualify for admission to the professional phase of the program offered by Rutgers, students must complete 21 credits of their Union County College general education requirements (including ENG 101, ENG 102 and UPR 101 (PSRT 1101)). A minimum GPA of 2.5 is also required.

In order to successfully complete this program, the student will be required to take the following courses. BE SURE TO CONFER WITH A UNION COUNTY COLLEGE OR RUTGERS ADVISOR WHEN PLANNING YOUR COURSE SCHEDULE.

GENERAL EDUCATION REQUIREMENTS – 30 CREDITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102 English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 128 The Dynamics of Communication OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Principles of Sociology</td>
<td>3</td>
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<tr>
<td>PSY 101 General Psychology</td>
<td>3</td>
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<tr>
<td>PSY 204 Lifespan Development</td>
<td>3</td>
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<tr>
<td>MAT 119 Algebra</td>
<td>4</td>
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<td>COM 100 Communications Technologies</td>
<td>4</td>
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<tr>
<td>BIO 102 Human Biology</td>
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</table>

RUTGERS REQUIREMENTS – 3 CREDITS

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>UPR 101 (PSRT 1101) – Introduction to the Principles of Psychosocial Rehabilitation – taken prior to entering professional phase</td>
<td>3</td>
</tr>
</tbody>
</table>

AFTER UNION COUNTY COLLEGE

Graduates may transfer to Kean University, Georgian Court University, or Felician College which offer a Joint Bachelor’s Degree Program in Psychology & Psychiatric Rehabilitation with the Rutgers School of Health Related Professions.

RECOMMENDED SEQUENCE

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSRT 1102 Communication Techniques in Interviewing and Counseling</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSRT 1103 Introduction to Group Dynamics*</td>
<td>3</td>
<td></td>
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<tr>
<td>PSRT 1204 Clinical Principles in Psychosocial Rehabilitation and Treatment*</td>
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<tr>
<td>SPRING SEMESTER</td>
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<tr>
<td>PSRT 1019 Clinical Practicum in Psychosocial Rehabilitation I*</td>
<td>6</td>
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<tr>
<td>PSRT 2121 Community Resource Management and the Individual with Severe Mental Illness*</td>
<td>3</td>
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<tr>
<td>Total Program Credits:</td>
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<td>60</td>
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</table>

* Students register through Rutgers for PSRT courses and pay Rutgers Undergraduate tuition rate and fees.

A total of 60 credits are required. The 32 credits of general education courses are provided by Union County College or may be transferred from other schools. The Rutgers School of Health Related Professions provides the 30 credits of Psychosocial Rehabilitation and Treatment (PSRT) courses. Except for UPR 101 (PSRT 1101) (PSRT 1101), students register at Rutgers for the PSRT courses and pay the Rutgers undergraduate tuition rate and fees. A grade of “C” or better in all major courses is required. Full and part-time courses of study are available, including day and evening classes. Classes are taken during fall and spring sessions.
This program offers a strong foundation for students wishing to major in either public and/or business administration. Upon completion students may transfer to a four-year institution where they can continue their studies in either public or business administration. The courses in this program are designed to develop analytical and quantitative skills as well as familiarity with the basic characteristics of government and business organizations.

The Public Administration program provides students with a solid professional education. It meets the 45 credit general education distribution requirements mandated for all Associate in Arts degree programs by the State of New Jersey. In addition to this substantial liberal arts component with a strong focus on government and history, this option is linked to the business program and includes courses in accounting, business administration, economics, and computer literacy. This is a substantial program geared to professionals in the field of public administration and for students seeking to transfer to a four-year institution where they can continue their studies.

Upon successful completion of all program requirements, graduates will be able to:

- Communicate effectively in written, verbal, and electronic formats;
- Analyze the principles and practices in the field of public administration management;
- Utilize technology as it applies to business practices and research.

### AFTER UNION COUNTY COLLEGE

This program is designed to transfer to a four-year college or university to further their education and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

### MILESTONES

Milestone courses (shown in bold) in the recommended course sequence identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

**Career and Transfer Information**

www.ucc.edu/academicmaps

### RECOMMENDED SEQUENCE

#### FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE#</th>
<th>COURSE</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
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#### SECOND YEAR

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Total Program Credits: 60

* GEO 201 recommended
By virtue of an agreement between Union County College and JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, Plainfield, NJ., sponsored by JFK, Edison, NJ. Union County College confers a degree of Associate in Science upon graduates of the Hospital-sponsored school who have fulfilled the requirements for the degree specified by the College.

Students in the program earn college credits in English, mathematics, biology, physics, psychology, computer systems and a humanities elective in classes and laboratories conducted at Union County College. Radiography courses are the primary responsibility of the program.

Students do not need to complete the general education courses in order to apply to the Radiography program.

The Joint Review Committee on Education in Radiologic Technology and the New Jersey Department of Environmental Protection, Radiologic Technology Board of Examiners accredit JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging. However, successful completion of some general education courses are required prior to starting the professional Radiography course in the Fall semester.

One may transfer up to 36 comparable credits (40 for those with a bachelor’s degree), into the program, no grade lower than C is considered for transfer.

Transfer of Anatomy and Physiology I and II is dependent on the time of completion of these courses. They are only transferable if they were taken <5 years prior to admission to the program.

Upon successful completion of all program requirements, graduates will be able to:

- Successfully complete the American Registry of Radiologic Technologists Board Examination in Radiography;
- Exhibit the appropriate skills and competency of an entry level Radiographer including:
  - Competency in performing routine and nonroutine (trauma) examinations in Radiography
  - Practicing appropriate basic patient care
  - Utilizing proper radiation protection for their patients, themselves, peers and others
  - Demonstration of proper and effective communication skills while speaking and writing
- Practice appropriate professional ethics of a Radiographer;
- Demonstrate appropriate problem solving and critical thinking skills necessary to be a proficient healthcare provider;
- Understand the benefits of additional personal and professional growth and lifelong learning skills necessary for the changing field of Radiography.

Graduates are eligible to sit for the American Registry of Radiologic Technologists and the New Jersey State Licensure Examinations.
RADIOGRAPHY

JFK MULENBERG HAROLD B. AND DOROTHY A. SNYDER SCHOOLS OF NURSING AND MEDICAL IMAGING ASSOCIATE IN SCIENCE DEGREE cont’d

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<td>RADM 120</td>
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<tr>
<td>CLPR 901</td>
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Semester Total: 7

FIRST YEAR

SECOND YEAR

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<td>RADM 212</td>
<td>Radiographic Physics</td>
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<td>RADM 223</td>
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Semester Total: 9

SECOND YEAR/SUMMER I

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Semester Total: 4

SECOND YEAR/SUMMER II

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Total Professional Course Credits: 41

Total Program Credits: 80

NOTE: Junior Seminar will be taken first year summer semester and Senior Seminar will be taken in second year summer semester.

- RNTM signifies courses offered to radiography, nuclear medicine technology and diagnostic medical sonography students only.

- Each professional semester, including the 4 summer sessions, have a clinical component that MUST be met for the successful completion of the program.

MILESTONES

Milestone courses (shown in bold) in the recommended course sequence identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information www.ucc.edu/academicmaps

**RECOMMENDED SEQUENCE**

**PROFESSIONAL RADIOGRAPHY COURSES**

(Fall Semester Start – on a seat availability basis)

This is a Full-time Day Program. Students must be available 5 days a week, Monday-Friday.

**FIRST YEAR**

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Semester Total: 7

**SECOND YEAR**

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Semester Total: 9

**SECOND YEAR/SUMMER I**

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Semester Total: 4

**SECOND YEAR/SUMMER II**

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Total Professional Course Credits: 41

Total Program Credits: 80

NOTE: Junior Seminar will be taken first year summer semester and Senior Seminar will be taken in second year summer semester.

- RNTM signifies courses offered to radiography, nuclear medicine technology and diagnostic medical sonography students only.

- Each professional semester, including the 4 summer sessions, have a clinical component that MUST be met for the successful completion of the program.
The Remote Pilot and Drone Application certificate program will provide a solid foundation in applying engineering technology for drones. Students will learn how to design and build a working Drone with fundamentals in artificial intelligence. Students will also be able to expand on their design skills for implementation of Internet of Things ecosystems and cross platform applications.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate FAA Part 107 literacy and obtain certification as a Drone Remote Pilot In Command (PIC)
- Develop and execute implementation strategies for solving industry needs using Drones and Applications leveraging Drones.
- Perform laboratory procedures and assess the validity of experimental/diagnostic data.
- Employ critical thinking to solve technical problems, in general, and to apply engineering technology problem solving methods based on business and industry standards.
- Express and interpret both technical and non-technical concepts orally, in writing, and in electronic formats.

AFTER UNION COUNTY COLLEGE

Graduates have the option of accepting positions as entry level drone designers for custom solutions, remote drone pilots, entry level analysts for drone platforms, and quality control technicians for drone manufacturing.

RECOMMENDED SEQUENCE

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<tbody>
<tr>
<td>COURSE#</td>
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<td>Total Program Credits:</td>
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Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found at https://www.ucc.edu/administration/institutional-research/excellence-and-accountability/gainful-employment-program-disclosures/
The Respiratory Care (RC) degree program prepares graduates for entry-level career opportunities in respiratory care. Through a 69-credit rigorous and cohesive curriculum sequence, students will acquire the effective communication, technical, analytical and critical thinking skills necessary to function effectively as a registered respiratory therapist. The program also prepares students who wish to transfer to a 4-year institution to pursue a bachelor’s degree in respiratory care or other professional and graduate programs.

Students in the Respiratory Care program are required to present the following items in order to participate in respiratory clinical courses:

- Criminal background check clearance
- Drug screening
- AHA CPR certification for the Healthcare provider
- Malpractice insurance
- Completed health records
- Official uniform

Additional information is available at: https://www.ucc.edu/academics/academic-divisions/division-of-allied-sciences/respiratory-care-program/

Upon successful completion of all program requirements, graduates will be able to:

- Communicate effectively in oral, written and visual forms;
- Demonstrate ethical and professional conduct to the respiratory care code of ethics;
- Function effectively as a registered respiratory therapist in a healthcare setting;
- Demonstrate critical thinking in cardiopulmonary diagnosis and monitoring;
- Manage respiratory care plans for adult, neonatal and pediatric patients.

AFTER UNION COUNTY COLLEGE

Graduates of the program will be eligible to sit for the National Board of Respiratory Care (NBRC) credentialing examinations necessary for practice as a licensed respiratory care practitioner (RCP).

**RECOMMENDED SEQUENCE**

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**Total Program Credits:** | **69**

*Prerequisites cumulative GPA: 2.5 or higher; students must achieve a C+ or higher in BIO 105.
An associate degree in Social Services from Union County College prepares students for further academic training and entry into professional agencies focused on the helping professions. In addition to core subjects, Social Services degree students take Psychology and Sociology courses to develop a consistent foundation in these disciplines, which lead to basic understanding of human behavior and the needs of individuals and groups.

Assisting individuals or groups with a specific need or problem includes providing support and guidance, such as referral to social service agencies. Students with a Social Services degree from Union County College may transfer to baccalaureate-granting institutions to pursue higher level degrees in Social Work, Psychology, or Sociology. Reciprocity agreements with undergraduate schools and colleges/universities with undergraduate and graduate levels frequently enable Union County College students to transfer without having to take additional associate-level undergraduate classes.

Students with a Social Services degree from Union County College may also participate in entry-level professional positions.

Upon successful completion of all program requirements, graduates will be able to:

- Illustrate cultural sensitivity through course work and behavior that reflect entry level professional readiness;
- Explain the origin and purpose of psychological and sociological theories;
- Apply quantitative and qualitative methods used in sociological and psychological research;
- Demonstrate information literacy through regular use of online technologies, i.e. learning management system, use of the college library to access database for scholarly journals, and writing assessment requiring basic APA methodologies;
- Demonstrate critical thinking, problem solving ability and ethical thinking through effective communication.

After Union County College
Graduates can transfer to a bachelor’s degree-granting institution and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

Recommended Sequence

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<td>(PSY 213) Social Research Methods</td>
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<td>SOC 273 - Marriage and the Family</td>
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</table>
**SOCIOLGY**

**Option offered through the Liberal Arts ASSOCIATE IN ARTS DEGREE**

Sociology is the scientific study of human society and social interaction. This program helps students understand and use sociological tools and insights to work effectively in a diverse society. The program is for students who plan to transfer to a four-year institution and major in Sociology or other related fields.

Upon successful completion of all program requirements, graduates will be able to:

- Apply sociological concepts and theories to social phenomena presented in each Sociology course;
- Explain social, cultural and global variations;
- Apply sociological theories to the analysis of social institutions that influence human behavior;
- Incorporate sociological knowledge and research findings into written and oral presentations;
- Use critical thinking skills to analyze and solve social problems;
- Utilize the scientific methods and quantitative methodologies to gather and evaluate data and draw conclusions.

**AFTER UNION COUNTY COLLEGE**

Graduates can transfer to a four-year degree program, majoring in the Social Sciences or Liberal Arts, or other areas of interest and are eligible to take advantage of articulation agreements Union County College has with four-year colleges and universities. See a transfer advisor for details.
By virtue of an agreement between Union County College and JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging, Plainfield, NJ, Union County College confers a degree of Associate in Science upon graduates of the Hospital-Sponsored school who have fulfilled the requirements for the degree specified by Union County College.

Students in the program earn college credits in English, mathematics, biology, physics, social sciences and humanities electives in classes and laboratories conducted at Union County College. Diagnostic Medical Sonography courses are the primary responsibility of the program.

Students must apply to JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging for admission to the Diagnostic Medical Sonography program. Candidates must be high school graduates and must have had high school biology and algebra.

Prior to enrolling in this program, you must apply to the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging for acceptance.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) with the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS) accredits JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging Diagnostic Medical Sonography Program [Program Number 110144].

Students are enrolled in the Schools of Diagnostic Medical Sonography and are matriculated by Union County College. They are eligible to participate in all student activates at Union County College and have the same rights and privileges as all other college students.

**ADMISSION TO THE DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM**

Admission is selective and competitive. Individuals must apply during the Open Admissions dates. Interested individuals should visit the Schools’ website www.jfkmuhlenbergschools.org for information about the Schools and required policies and procedures.

Application for admission consideration for the Diagnostic Medical Sonography Program requires the following:

- Must have a cumulative GPA of 2.5 or higher in relevant courses.
- TEAS Entrance Exam scores of 58% or higher in Math and Reading.
- General education courses not need to be taken prior to applying to the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging. However, successful completion of some general education courses are required prior to starting the professional Diagnostic Sonography Imaging course in the Spring semester.
- One may transfer up to 36 comparable credits (40 for those with a bachelor’s degree) into the program, no grade lower than C is considered for transfer. All professional courses must be passed with a C+ or better.

Upon successful completion of all program requirements, graduates of the Diagnostic Medical Sonography Program will be able to:

- Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results;
- Perform appropriate procedures and record anatomic, pathologic, and/or physiologic data for interpretation by a physician;
- Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician;
- Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services;
- Demonstrate appropriate communication skills with patients and colleagues;
- Act in a professional and ethical manner;
- Provide patient education related to medical ultrasound and/or other diagnostic techniques, and promote principles of good health.

**AFTER UNION COUNTY COLLEGE AND JFK MUHLENBERG HAROLD B. AND DOROTHY A. SNYDER SCHOOLS OF NURSING AND MEDICAL IMAGING**

Upon completion graduates are eligible to sit for the credentialing examinations of the American Registry of Radiologic Technologists (ARRT) and the American Registry for Diagnostic Medical Sonography (ARDMS).

Graduates will also be prepared to advance to a Bachelor’s Degree and will be counseled on an individual basis regarding this intention.
PROGRAMS OF STUDY

DIAGNOSTIC MEDICAL SONOGRAPHY

JFK MUHLBENBERG HAROLD B. AND DOROTHY A. SNYDER SCHOOLS OF NURSING AND MEDICAL IMAGING ASSOCIATE IN SCIENCE DEGREE cont’d

RECOMMENDED SEQUENCE

24-MONTH FULL-TIME CURRICULUM
STUDENTS MUST COMPLETE THE GENERAL EDUCATIONAL REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE DEGREE

GENERAL EDUCATION REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 105</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 119</td>
<td>Algebra</td>
<td>4</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 127</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CST 101</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ALH 201</td>
<td>Pathophysiology &amp; Health Care</td>
<td>3</td>
</tr>
<tr>
<td>BIO 106</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
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</table>

Humanities Gen Ed Requirement: 3

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>PHY 101</td>
<td>General Physics I</td>
<td>3</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PHY 111</td>
<td>Mechanics Laboratory</td>
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<tr>
<td>PHY 125</td>
<td>Elements of Physics</td>
<td>3</td>
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OR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYL 111</td>
<td>Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYL 125</td>
<td>Elements of Physics Laboratory</td>
<td>1</td>
</tr>
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</table>

Total: 41

ENG 101 & ENG 102, BIO 105 & BIO 106, MAT 119, PHY 101 or PHY 125 are required prerequisite courses that must be completed prior to the professional courses.

MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

PROFESSIONAL COURSES

Professional Courses begin in the Summer Session I Only

The following is the sequence of the professional courses

Spring Semester Start - on a seat availability basis. This is Full time Day program. Students must be available 5 days a week, Monday - Friday.

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>DMSM 101</td>
<td>Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>RNTM 101</td>
<td>Medical Terminology</td>
<td>1</td>
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</table>

Semester Total: 3

Summer I & II

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>DMSM 100</td>
<td>Introduction to Clinical Sonography</td>
<td>2</td>
</tr>
<tr>
<td>DMSM 102</td>
<td>Cross-sectional Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DMSM 103</td>
<td>Ultrasound Physics and Instrumentation Part I</td>
<td>3</td>
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<tr>
<td>CLPS 901</td>
<td>Clinical Sonography I</td>
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Semester Total: 7

Fall Semester

<table>
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<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>RNTM 102</td>
<td>Health Care Today</td>
<td>2</td>
</tr>
<tr>
<td>DMSM 105</td>
<td>Ultrasound of the Abdomen Part I</td>
<td>3</td>
</tr>
<tr>
<td>DMSM 109</td>
<td>Obstetrical Sonography</td>
<td>3</td>
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<tr>
<td>DMSM 104</td>
<td>Ultrasound Physics and Instrumentation Part II</td>
<td>3</td>
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<tr>
<td>CLPS 902</td>
<td>Clinical Sonography II</td>
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Semester Total: 11

Spring Semester

<table>
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<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>DMSM 106</td>
<td>Ultrasound of the Abdomen Part II</td>
<td>3</td>
</tr>
<tr>
<td>DMSM 117</td>
<td>Obstetrical Sonography Part II</td>
<td>3</td>
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<tr>
<td>CLPS 903</td>
<td>Clinical Sonography III</td>
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</table>

Semester Total: 6

Summer I & II

<table>
<thead>
<tr>
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<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>DMSM 107</td>
<td>Ultrasound of the Female Pelvis</td>
<td>3</td>
</tr>
<tr>
<td>DMSM 111</td>
<td>Ultrasound of Superficial Structures I</td>
<td>3</td>
</tr>
<tr>
<td>CLPS 904</td>
<td>Clinical Sonography IV</td>
<td></td>
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</table>

Semester Total: 6

Fall Semester

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>DMSM 118</td>
<td>Ultrasound of Superficial Structures II</td>
<td>3</td>
</tr>
<tr>
<td>DMSM 116</td>
<td>Ultrasound Registry Review</td>
<td>3</td>
</tr>
<tr>
<td>CLPS 905</td>
<td>Clinical Sonography V</td>
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</tr>
</tbody>
</table>

Semester Total: 6

Total Professional Credits: 39

Total Program Credits: 80

NOTE: The remaining general education courses listed in this sequence may be taken in any semester including the Winter sessions if the student chooses to do so.

All of the professional and general education courses MUST be successfully completed according to programs grading policy prior to graduation eligibility.
The program at Union County College has a solid foundation of business, computers, and liberal arts courses. This permits more options with the greatest potential for professional development in terms of job responsibilities and monetary compensation. It provides students with opportunities to develop what most business employers perceive as entry-level skills (e.g., public speaking, writing for business, and general economics). It also introduces students to financial accounting, marketing, and legal issues applicable to the industry.

Upon successful completion of all program requirements, graduates will be able to:

- Apply knowledge of the aspects of finance, human resources, marketing, budgeting, career exploration, and resume writing to sport management;
- Explain how sports impact local, national and international affairs;
- Analyze the sociological, legal, financial, and historical influences on the field of sport management;
- Communicate effectively in writing, verbal, or electronic formats to a diverse, multicultural audience in the field of sport management;
- Demonstrate the ability to identify, locate, evaluate, and effectively manage information using library and electronic resources to solve complex problems in the study of sport management;
- Apply critical thinking, ethical reasoning, and quantitative reasoning skills to understand and resolve issues in sport management.

### AFTER UNION COUNTY COLLEGE

Graduates of this program may work in one of the many areas of this rapidly growing industry. Students may also transfer to a college or university that offers a bachelor’s degree in Sport Management.

### RECOMMENDED SEQUENCE

#### FIRST YEAR

<table>
<thead>
<tr>
<th>Course#</th>
<th>Course</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 127</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>COM 100</td>
<td>Communications Technologies</td>
<td>4</td>
</tr>
<tr>
<td>BSM 101</td>
<td>Introduction to Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>Human Resources Management</td>
<td>3</td>
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<tr>
<td><strong>Semester Total:</strong></td>
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<tr>
<td><strong>SPRING SEMESTER</strong></td>
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<td></td>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>Introductory Technical and Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>Lab Science Gen Ed Requirement</td>
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</tr>
<tr>
<td>BSM 110</td>
<td>The Evolution of American Sports</td>
<td>3</td>
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<td><strong>Semester Total:</strong></td>
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<tr>
<td><strong>SECOND YEAR</strong></td>
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<td></td>
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<tr>
<td>Humanities Gen Ed Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 128</td>
<td>The Dynamics of Communication</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>BSM 205</td>
<td>Sports in Society</td>
<td>3</td>
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<tr>
<td>ACC 103</td>
<td>Accounting I</td>
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<td><strong>Semester Total:</strong></td>
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<tr>
<td><strong>SPRING SEMESTER</strong></td>
<td></td>
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<tr>
<td>BSM 210</td>
<td>Sport &amp; Law</td>
<td>3</td>
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<tr>
<td>BSM 220</td>
<td>Current Issues in Sports</td>
<td>3</td>
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<tr>
<td>BUS 208</td>
<td>Principles of Marketing</td>
<td>3</td>
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<tr>
<td>BUS 290</td>
<td>Co-op Education Experience in Business*</td>
<td>3</td>
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<tr>
<td>ECO 202</td>
<td>Principles of Economics II</td>
<td>3</td>
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<td><strong>Semester Total:</strong></td>
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<tr>
<td><strong>Total Program Credits:</strong></td>
<td></td>
<td><strong>60</strong></td>
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</table>

* Students planning to transfer may take COM 101 or ECO 201.

Students should ascertain from the transfer institution which course is preferred.
Union County College students have successfully transferred to top colleges and universities across the country, including:

- Georgetown University
- Princeton University
- Dartmouth College
- University of California – Los Angeles
- University of Southern California
- University of New Haven
- Florida Southern College
- University of North Florida
- Idaho State University
- Mount Holyoke College
- University of Maryland – College Park
- Bloomfield College
- College of New Jersey
- Fairleigh Dickinson University – Madison
- Kean University
- Montclair State University
- New Jersey City University
- New Jersey Institute of Technology
- Ramapo College of New Jersey
- Rider University
- Rowan University
- Rutgers – The State University of NJ – Newark
- Rutgers – The State University of NJ – New Brunswick
- Seton Hall University
- Stockton University
- Bard College
- Cornell University
- CUNY John Jay College of Criminal Justice
- Rochester Institute of Technology
- The Ohio State University
- Drexel University
- American University
- George Washington University
- Liberty University ... and many more.
The Supply Chain Management degree program provides fundamental principles of supply chain management and logistics. Students learn the roles and functions of inventory control and distribution planning, transportation systems, purchasing, computerized logistics, and careers in the field.

Upon successful completion of all program requirements, graduates will be able to:

- Differentiate supply chain management from logistics;
- Explain purchasing processes, policies, and procedures;
- Compare modes of transportation and related policies;
- Outline computer and supply chain security measures;
- Explain how technology is utilized in logistics and supply chain management;
- Communicate effectively in both oral and written forms for all business settings;
- Apply critical thinking, ethical reasoning, and quantitative reasoning skills to resolve issues in supply chain management;
- Demonstrate the ability to identify, locate, evaluate, and effectively manage information using library and electronic resources to solve complex problems in the study of supply chain management.

AFTER UNION COUNTY COLLEGE

Graduates will be prepared with the knowledge and skills that have labor market value to the SCM industry. Graduates will be equipped for entry-level careers or advancement in the field of supply chain management and they will be able to continue their education by transferring to a four-year college.

RECOMMENDED SEQUENCE

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>FALL SEMESTER</th>
<th>COURSE#</th>
<th>Course</th>
<th>Cr.</th>
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<tbody>
<tr>
<td></td>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
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<td></td>
<td>CST 100</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>BUS 105</td>
<td>Organization and Management</td>
<td>3</td>
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<td>SCM 101</td>
<td>Introduction to Supply Chain Management</td>
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<tr>
<td></td>
<td>ACC 103</td>
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<td>SPRING SEMESTER</td>
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<td>SCM 105</td>
<td>Inventory Management</td>
<td>3</td>
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<td></td>
<td>SCM 110</td>
<td>Logistics Technology</td>
<td>3</td>
<td></td>
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<td></td>
<td>BUS 110</td>
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<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th>FALL SEMESTER</th>
<th>COURSE#</th>
<th>Course</th>
<th>Cr.</th>
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<tr>
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<td>ECO 201</td>
<td>Principles of Economics I</td>
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<td>MAT 143</td>
<td>Elementary Mathematical Analysis I</td>
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<td>SCM 201</td>
<td>Transportation Operations</td>
<td>3</td>
<td></td>
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<td></td>
<td>SCM 205</td>
<td>Purchasing and Supply Chain Management</td>
<td>3</td>
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<td></td>
<td>BUS 201</td>
<td>Business Law I</td>
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<tr>
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<td>ENG 128</td>
<td>The Dynamics of Communication</td>
<td>3</td>
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<td></td>
<td>OR</td>
<td>ENG 129</td>
<td>Public Speaking</td>
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<td></td>
<td>ECO 202</td>
<td>Principles of Economics II</td>
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Total Program Credits: 60
The Supply Chain Management certificate of achievement program provides fundamental principles of supply chain management and logistics. Students learn the roles and functions of inventory control and distribution planning, transportation systems, purchasing, computerized logistics, and careers in the field.

The certificate of achievement program will prepare students who have already earned a degree to work in the supply chain management field.

Upon successful completion of all program requirements, graduates will be able to:

- Differentiate supply chain management from logistics;
- Explain purchasing processes, policies, and procedures;
- Explain how technology is utilized in logistics and supply chain management;
- Outline computer and supply chain security measures;
- Compare modes of transportation and related policies;
- Communicate effectively in both oral and written forms for all business settings.

AFTER UNION COUNTY COLLEGE

Graduates will be prepared with the knowledge and skills that have labor market value to the SCM industry. Graduates will be equipped for entry-level careers or advancement in the field of supply chain management.
The Sustainability Science Option offers the first two years of a bachelor’s degree program with a major in Sustainability Science/Studies. It is designed for students who seek a career that focuses on the principles of sustainability as applied to a specific industry or business. A four-year graduate would be qualified for such current job titles as: Business Sustainability Officer or Manager, Sustainability Auditor, Energy Consultant, Design and Materials Consultant and Green Construction Manager.

Other course substitutions may be appropriate and students are encouraged to consult with the STEM Dean’s office regarding appropriate course selections. Because of the diversity of undergraduate Sustainability Science programs, it may be necessary for students to take one or more second year courses at their transfer institution.

The stated sequence of courses for the Sustainability Science option assumes the completion of all prerequisites for the mathematics courses or satisfactory performance on the College Level Mathematics exam. Contact the STEM Division for further information.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate an understanding of ecological, geological and sustainability principles and their relations to problems involving environmental quality control and sustainability issues;
- Employ computer software applications to represent and solve technical problems;
- Perform laboratory procedures and assess the validity of experimental/diagnostic data;
- Employ critical thinking and problem solving skills to solve technical problems;
- Express and interpret both technical and non-technical concepts orally, in writing, and in electronic formats;
- Demonstrate information literacy through familiarity and the effective use of related information resources.

AFTER UNION COUNTY COLLEGE

Graduates can transfer to a bachelor’s degree-granting institution to major in Sustainability Science/Studies.

RECOMMENDED SEQUENCE

FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE#</th>
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SECOND YEAR

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* The stated sequence of courses for the Sustainability Science program assumes that the student is math-ready for calculus.
The A.A.S. degree in Technical Studies will provide a means for students to acquire credits based on technical training within their employing organization. Credit may be granted to individuals who have successfully completed courses evaluated by the American Council on Education (ACE) in a corporate, industrial or military training program or through a certified apprenticeship training program in the building and construction trades and who are interested in pursuing an associate in applied science degree according to the following guidelines:

Program is evaluated by the American Council on Education (ACE)

- Collegiate-level depth/breadth of curriculum beyond entry-level requirements
- Number of lecture/lab hours of study
- Company and trainer certifications
- Prior completion of prerequisites or predetermined skill level

Upon successful completion of all program requirements, graduates will be able to:

- Apply theory and hands-on practices to the specific area of technical studies within their employing organization;
- Perform laboratory procedures and assess the validity of experimental/diagnostic data;
- Employ critical thinking and problem solving skills to solve technical problems;
- Demonstrate the ability to effectively communicate and present information in a logical and systematic manner;
- Express and interpret both technical and non-technical concepts orally, in written, and electronic formats;
- Demonstrate information literacy through familiarity and the effective use of technical literature in their field of study.

AFTER UNION COUNTY COLLEGE

Upon graduating the student will have increased opportunities for professional and personal advancement. This A.A.S. degree is not transferable to a four-year institution, but many of the non-technology courses may transfer.
This program is designed for students preparing to transfer to a four-year college or university to pursue a Bachelor of Arts or Bachelor of Fine Arts in Acting or Theater. Students will explore the various styles and periods of theater throughout history. Students will develop skills in movement, voice, and acting. Students will demonstrate those skills in various performances. Students will also watch live performances and analyze them through written and oral discussion.

Upon successful completion of all program requirements, graduates will be able to:

- Demonstrate, in written and oral communication, a basic understanding and appreciation of the history of drama and theater acting and the various elements of drama and theatrical performance;
- Perform effectively as an actor in a specified scene;
- Use technology for learning and research pertinent to musical and theatrical appreciation, history, or performance;
- Apply critical thinking and problem-solving skills to situations involving theater.

### AFTER UNION COUNTY COLLEGE

Graduates may transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.

---

### MILESTONES

Milestone courses (shown in bold in the recommended course sequence) identify critical courses for timely progress and the semester in which the course should be completed for on-time graduation. Milestone course grades less than a 2.0 (C) should be discussed with an advisor.

Career and Transfer Information
www.ucc.edu/academicmaps

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<tr>
<th>COURSE#</th>
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<td>ENG 128</td>
<td>The Dynamics of Communication</td>
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<td>OR ENG 129</td>
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### FIRST YEAR

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<td>FIA 132</td>
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<td>FIA 105</td>
<td>Music Appreciation</td>
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<td>FIA 232</td>
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Total Program Credits: 60
The Visual Arts option is designed for students preparing to transfer to a four-year college or university to pursue a Bachelor of Arts or Bachelor of Fine Arts in various areas of the visual arts. Students will be provided with a background in studio art including study in art appreciation, art history, studio foundations, and various applications of art.

Upon successful completion of all program requirements, graduates will be able to:

- Apply formal creative issues including composition, balance, space, line, and form;
- Demonstrate skills associated with two-dimensional imaging;
- Demonstrate use of diverse materials, various media, and techniques in foundation level drawing, painting or photography studio activities;
- Analyze, both orally and in writing, the visual arts through art history;
- Use technology for learning and research pertinent to the visual arts;
- Create portfolio that demonstrates competency in the visual arts.

AFTER UNION COUNTY COLLEGE

Graduates of this program can transfer to a four-year college or university into a similar degree program or other areas of interest and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer advisor for details.
The Web and Mobile Application Development program option is offered through the Computer Information Systems and Technology, A.S. degree. This innovative program is designed for students who would like to specialize in application development while pursuing an information systems and technology degree. The curriculum develops a strong foundation in information systems, database management, and systems analysis and design while students learn how to design and develop web-based and mobile applications.

Students will study and gain experience with programming languages and frameworks, with the design of user interfaces, and with topics such as networking, infrastructure, and security concerns. Students will be prepared for the new technologies that are constantly being developed.

This course of study is supported by relevant business, written and oral communications, and general education courses providing students the background in critical thinking and entrepreneurial savvy to apply to a variety of challenging problems to today's technology needs.

Upon successful completion of all program requirements, graduates will be able to:

- Develop a mobile or web-based application from conception to completion, using a consistent and branded user experience;
- Create an efficient normalized database and manipulate it using structured query language given a set of specifications;
- Identify and analyze user needs and take them into account in the selection, creation, evaluation, documentation, and administration of computer-based systems;
- Utilize critical thinking and current technology to effectively integrate IT-based solutions into the user environment;
- Discuss the ethical and social responsibilities necessary for IT businesses and organizations;
- Use written, oral, and electronic formats to effectively and professionally communicate to diverse multicultural audiences within a business environment.

**AFTER UNION COUNTY COLLEGE**

Graduates will work as mobile or web-based application developers or transfer to a four-year degree program in any number of computer science or information systems and technology programs.

**RECOMMENDED SEQUENCE**

**FIRST YEAR**

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* MAT 119 or higher level math. Transfer students should consult with their transfer institution.*
YOUR GUIDE TO UNION COUNTY COLLEGE'S COURSE DESCRIPTIONS

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<td>CLPR • Clinical – Radiography, Muhlenberg</td>
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<td>CLPS • Clinical – Sonography, Muhlenberg</td>
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<td>ESP • eSports Management</td>
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<td>HSM • Hotel, Restaurant &amp; Tourism Management</td>
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<td>INT • Interpreting Spoken Language</td>
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<td>PTA • PhysicalTherapist Assistant</td>
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ACC 103 – Accounting I

Financial Accounting is the focus for this introductory course in Accounting. During the initial part of the course, students learn and apply fundamental bookkeeping procedures, including debit and credit analysis, journalizing, posting, and completing a trial balance. Adjustments and producing the Income Statement and Balance Sheet are essential elements for students in learning the accounting cycle. Students will also learn about merchandising accounting, inventory costing methods, and will gain some exposure to specialized journals and the subsidiary ledgers. Additional topics covered include bank reconciliations, bad debts and depreciation methods. At the end of the course, students focus on recording gains and losses on the disposal of assets. Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

ACC 104 – Accounting II

This course is a continuation of ACC 103. Topics include accounting for partnerships and corporations with an emphasis on equity structures, financial statements, and journal entries. Continuing with corporate accounting, students study investment income with gains and losses, corporate bonds, and currency differentials. Analysis of financial statements is a critical topic covered. These include the Cash Flow Statement, Income Statement and Balance Sheet. A substantial area of study covers managerial accounting, including manufacturing accounting. Prerequisite(s): ACC 103, or the equivalent
3 lecture hours per week
3 credit hours

ACC 203 – Intermediate Accounting I

This course covers the application of accounting theory to the classification of assets, liabilities, and equity. Additional topics include accounting for intangible assets, consigned inventory and cash management. Material covered is FASB and AICPA oriented. Prerequisite(s): ACC 104, or the equivalent
3 lecture hours per week
3 credit hours

ACC 204 – Intermediate Accounting II

This course is a continuation of Intermediate Accounting I with an analytical approach to studying the Income Statements, retained earnings, and changes in financial position. Influences of federal taxation on financial reporting, consolidation and branch accounting are examined. Material is FASB and AICPA oriented. Prerequisite(s): ACC 203
3 lecture hours per week
3 credit hours

ACC 205 – Cost Accounting

This course covers the theory and concepts applied to accounting for costs of manufacturing operations. Topics include methods of controlling and costing material inventory; procedures for charging labor and overhead costs to production; production data and flow; job order and process cost cycles; planning flexible budgets and standard cost variance analysis. Prerequisite(s): ACC 104, or equivalent
4 lecture hours per week
4 credit hours

ACC 210 – Microcomputers in Accounting

This course covers the study and development of skills in the application of accounting and financial functions on the microcomputer. The course will provide the student with hands-on experience in various accounting software applications and spreadsheet use. Prerequisite(s): ACC 104
3 lecture hours per week
3 credit hours

ACC 211 – Federal Taxes I

This course is a study of Internal Revenue codes commonly used by individuals and small businesses for returns, rates, credits, gross income inclusions, gains and losses, basis, dividends, deductions, and preparation of individual returns. Prerequisite(s): ACC 103
3 lecture hours per week
3 credit hours

ACC 212 – Federal Taxes II

This course is a continuation of ACC 211 with an emphasis on partnerships and corporations, estates and trusts. A study of Social Security taxes and Federal Estate tax complement the subject matter covered. Prerequisite(s): ACC 211
3 lecture hours per week
3 credit hours

ACC 290 – Co-op Education Experience in Accounting

This course is an externship of approximately 200 hours in an accounting position with a local business or industry, with or without compensation. If an externship cannot be arranged, a term project on off campus will be assigned. An elective may be substituted. Prerequisite(s): ACC 203, or the equivalent
Division approval required
200 externship hours
3 credit hours

ADM 101 – Keyboarding for the Computer I

This course is designed for those who plan to use a computer for personal and professional purposes. Students learn the alphabetic, numeric, and symbol keys, including the ten-key pad on PCs. The basic skills needed for document formatting are taught. Reports, letters, and memoranda are introduced. This course is open to all majors. Prerequisite(s): ENG 097, if required
1 lecture hour and 2 laboratory hours per week
2 credit hours

ADM 102 – Keyboarding for the Computer II

This course is a continuation of Keyboarding for the Computer (ADM 101) where proper keyboarding techniques and computer literacy were stressed. This course begins with production work, while continuing to stress the importance of proper techniques. Topics include: tables, rough-draft reports, bulleted and numbered lists, business and personal letters, reports with footnotes and endnotes, bibliographies, and employment papers. Prerequisite(s): ADM 101, or Challenge Examination, or approval of Division
1 lecture hour and 2 laboratory hours per week
2 credit hours
ADM 110 – Health Care Computer Skills
This course covers mastering the correct keyboard techniques and building keyboarding especially on basic computer concepts are also learned. Using Microsoft Word and PowerPoint students learn the fundamentals of document processing and professional presentations. Students also learn to create, edit, and format an APA style report. The essentials of the Internet and Web including netiquette and email, copyright, privacy, and security are discussed. Students have “hands-on” experience with a learning management system. This course should be taken prior to enrolling in Trinitas School of Nursing courses.1 lecture hour and three laboratory hours per week 2 credit hours

ADM 131 – Administrative Procedures
This course discusses general administrative professional orientation, including the role of a professional secretary. This course develops self-confidence and a professional attitude. Lectures and discussions on records management, mail processing, travel arrangements, business meetings, communications responsibilities, financial assistance, investments, human relations in the office, grooming, and career advancement. Development of business vocabulary and business communications skills is included. Also, an overview of employment search activities such as the resume and interview process is covered. Prerequisite(s): ENG 097, if required 3 lecture hours per week 3 credit hours

ADM 135 – Proofreading and Editing Skills
This course addresses the complaint of many office supervisors that employees lack business communication skills. Major emphasis is on developing technical editing skills needed for successful employment in a business environment. Students apply these skills to typical business correspondence. This course is ideal for students who are planning a career where communication skills are required. Prerequisite(s): ENG 096, if required 3 lecture hours per week 3 credit hours

ADM 140 – Customer Service
This course covers the many aspects of customer service skills needed in business and industry. The course examines the people, practices, and events that are needed in the field of customer service. The course includes an overview of customer service, discusses specific skills and related topics, and provides insight into future customer service trends and issues. This course is beneficial to anyone in business and industry that provides products, services, or information. Prerequisite(s): ENG 097, if required 3 lecture hours per week 3 credit hours

ADM 213 – Word I
This course introduces the student to the use of a current version of Microsoft Word. Topics include: creating/editing documents, formatting, spell/thesaurus/grammar checker, widow/orphan control, headers/footers, multiple windows, find/replace, Auto text, templates, Wizards, borders, Microsoft Draw, WordArt, tables, columns, styles, and more. Material covered in this course helps prepare the student for the Microsoft Certified Applications Specialist (MCAS) exam in Word. Prerequisite(s): ADM 101 2 lecture and 2 laboratory hours per week 3 credit hours

ADM 214 – Word II
This course is a continuation of ADM 213 (Word I). Students learn how to insert pictures and text boxes, create newsletters, control text flow, create and modify styles, insert and edit fields, use electronic forms, use mail merge, create and manage macros, use advanced table-formatting features, create charts and import data into charts, add/edit footnotes and endnotes, create and navigate outlines, create master documents, create and track comments, create hyperlinks and more. Material covered in this course helps prepare the student for the expert level of the Microsoft Certified Applications Specialist (MCAS) exam in Word. Prerequisite(s): ADM 213 2 lecture and 2 laboratory hours 3 credit hours

ADM 215 – Excel I
This course introduces the student to the use of a current version of Microsoft Excel. Students build a worksheet from a beginning level to an intermediate level. Topics include creating and formatting a worksheet, enhancing a worksheet, absolute and relative referencing, functions, advanced formulas, dates, times, financial functions, templates, multiple worksheets/files, charts, and more. Material covered in this course helps prepare the student for the Microsoft Certified Applications Specialist (MCAS) exam in Excel. Prerequisite(s): ADM 101 2 lecture and 2 laboratory hours per week 3 credit hours

ADM 216 – Access
This course introduces the student to the use of a current version of Microsoft Access. Students create a database and learn to maximize productivity. Some of the topics included are creating a database, organizing and retrieving data, working with tables, creating queries and advanced queries, building forms, reports and data access pages, automating and extending Access, entering criteria, sorting, structure, validation, referential integrity, the World Wide Web, Hyperlink fields, briefcase replication, wizards, and macros. Materials covered in this course help prepare the student for the Microsoft Certified Applications Specialist (MCAS) exam in Access. Prerequisite(s): ADM 101 2 lecture and 2 laboratory hours per week 3 credit hours

ADM 217 – PowerPoint
Students learn how to create professional-looking presentations using a current version of Microsoft PowerPoint. Some of the topics covered are creating and editing, table slides, templates, ClipArt Gallery, autoshapes, drawing tools, organization charts, enhancing presentations, slide time, running an automatic slide show, selecting color schemes, captions, integrating Word and Excel, creating presentations for a Web page, AutoContent, Hyperlinks, and more. Material covered in this course helps prepare the student for the Microsoft Certified Applications Specialist (MCAS) exam in PowerPoint. Prerequisite(s): ADM 101 2 lecture and 2 laboratory hours per week 3 credit hours

ADM 290 – Co-op Education Experience in Administrative Support
This course is an externship of approximately 200 hours in the office of local business firms. If an externship cannot be arranged, a term project on or off campus will be assigned. Co-op should be taken in student’s last year of program. An elective may be substituted for this course. Prerequisite(s): Permission of Division Dean’s office. Approximately 200 hours 3 credit hours
**ALH • Allied Health**

**ALH 161 – Medical Terminology**
This course is designed to familiarize students with the basic vocabulary used in health care. Students will apply word-building, using prefixes, suffixes, roots, and combining forms, to master the terminology of the health field. A systems approach will be used to survey the basic anatomy and physiology of the human body, with identification of selected terms that define the pathologies, diagnostic procedures, and treatments associated with each system.

3 lecture hours per week
3 credit hours

**ALH 201 – Pathophysiology & Health Care**
This course will introduce the student to the mechanisms of health and human disease. Students will be introduced to factors influencing health and the promotion and maintenance of wellness. An overview will be provided of the etiology, diagnosis, and treatment of major diseases, along with how to apply this knowledge as an allied health care practitioner. Focus will be placed on the most common clinical conditions likely to be encountered by health care professionals. Classification, symptoms, and terminology will be discussed.

Prerequisite(s): College-entry level competency in English and Math
3 lecture hours per week
3 credit hours

**ARB • Arabic**

▲ **ARB 101 – Beginning Arabic I**
This course will provide students with a solid foundation in pronunciation, grammar, and proficiency in the four language skills of understanding, speaking, reading, and writing. Media are incorporated into classroom experience. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.

Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

▲ **ARB 102 – Beginning Arabic II**
This is a continuation of ARB 101. This course will build on the student’s knowledge of Arabic 1 through the development of communicative language via classroom and web-based activities. Emphasis on aural skills, reading, and advanced grammatical structures. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.

Prerequisite(s): ARB 101, or 2 years high school Arabic
3 lecture hours per week
3 credit hours

**ARC • Architecture**

**ARC 101 – Architectural Design I**
This course introduces the student to architectural design through the examination of basic principles and elements of design. Human needs such as personal identity, privacy, community and security are studied and applied to a series of problems in spatial organization. The student learns through skills such as sketching and 3-D modeling to create a design language of three-dimensional relationships. Spatial relationships of three dimensions and the philosophy of architectural design are also included in this course.

Co-requisite(s): ARCL 101
3 lecture and 5 laboratory hours per week
5 credit hours

**ARC 102 – Architectural Design II**
In this course, the student engages in a further exploration of architectural design issues, examining the impact of the environment on physical and mental health, user-groups and their responses to environments, and architectural design as the expression of social values, cultural patterns, and historical heritage. This course also covers the execution and criticism of a series of related architectural problems and projects.

Prerequisite(s): ARC 101, or approval of Division
Co-requisite(s): ARCL 102
3 lecture and 5 laboratory hours per week
5 credit hours

**ARC 105 – Introduction to Architecture and Culture**
This course is an introductory study of architecture and design issues that impact society. This course is for students interested in pursuing studies in architecture and design fields such as landscape architecture, interior design, urban planning, historic preservation, real estate, and facilities design. It explores how architecture and environments impact and shape our lives and communities. Technical aspects of architecture will be introduced through examples as well as the cultural and historic basis for design.

Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

**ARC 205 – Architectural CAD Design**
This course covers the basics of computer technology and software applications used in the architectural profession to design, produce, present, and communicate with other design professionals and clients. Using Computer Aided Design, students will perform a series of design assignments. Applications of computer tools in resolving design issues during the various phases of a project will be discussed and utilized. The course will build on the elements of architectural theory and practice introduced in ARC 101 and ARC 102. Execution and project reviews will be conducted in a group format.

Prerequisite(s): ARC 102, or approval of Division
Co-requisite(s): ARCL 205
2 lecture and 3 laboratory hours per week
3 credit hours

**ARC 206 – Architectural 3D Design**
This course covers the more advanced aspects of Computer Aided Design of architecture and design projects. Students will complete projects involving the resolution of a more complex set of design issues. They will use advanced applications of Computer Aided Design (CAD) and three-dimensional modeling to construct a design project and presentation layout from start to finish. Execution and project reviews will be conducted in a group format.

Prerequisite(s): ARC 205, or approval of Division
Co-requisite(s): ARCL 206
2 lecture and 3 laboratory hours per week
3 credit hours

**ARC 210 – Portfolio Development and Presentation Methods**
This course will provide the architecture and design student with the foundation to prepare a design portfolio. The student will be encouraged to organize a comprehensive assemblage of work. Various techniques of media images are demonstrated and applied to the student’s individual design projects. This portfolio typically is used for transfer evaluations and work/job interviews.

Prerequisite(s): ARC 102, or approval of Division
Co-requisite(s): ARCL 210
1 lecture and 3 laboratory hours per week
2 credit hours

▲ = Fulfills a General Education Requirement

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ARCL 205 – Architectural CAD Design Laboratory
This is a co-requisite laboratory course for ARC 206.
Co-requisite(s): ARC 205

ARCL 210 – Portfolio Development and Presentation Methods Laboratory
This is a co-requisite laboratory course for ARC 210.
Co-requisite(s): ARC 210

ASL • American Sign Language

ASL 101 – American Sign Language I
This course is designed to introduce the student to American Sign Language, the visual-gestural language of Deaf persons, and Deaf Culture and to develop receptive and expressive communication skills with incorporation of visual-gestural techniques, ASL vocabulary, basic rules of grammar, syntax and some cultural features of the Deaf community. Co-requisite(s): ASL 102, except when taken as modern language requirement only 3 lecture hours per week 3 credit hours

ASL 102 – Visual-Gestural Communication
In this course, students will develop the skills for visual-gestural aspects of communication that are an integral part of American Sign Language. Emphasis will be on visual and kinetic readiness via visual-gestural communication techniques, visual discrimination and memory exercises as well as kinetic movements and exercises of body, face, arms and hands and their relationship to space. Spatialization and its relationship to the signer's perspective will be developed through exercises. Emphasis will be on mastering visual and kinetic skills related to visual-gestural communication and non-manual behaviors of American Sign Language. Students will conduct research on the similarities and differences between American Deaf Culture and visual-gestural/non-manual aspects. Co-requisite(s): ASL 101 2 lecture hours per week 2 credit hours

ASL 103 – American Sign Language II
This course is a continuation of ASL I (ASL 101). It is designed to develop further competency in ASL above the basic level. Students will be exposed to ASL transcription symbols, sentence types, non-manual behaviors, time, pronominalization, subjects and objects, classifiers, locatives, pluralization, temporal and distributional aspects. Some information about the Deaf Community and its culture will also be featured throughout the course. Receptive and expressive sign vocabulary will be featured through class activities leading to basic conversational skills in ASL. Students will be expected to interact with the Deaf Community in real-life situations, thereby enhancing their awareness of and sensitivity to various aspects of Deaf Culture and ASL. Co-requisite(s): ASL 103 and HUD 104 3 lecture hours per week 3 credit hours

ASL 104 – ASL Classifiers
This course will expand on understanding the principles of Classifiers, an integral part of American Sign Language (ASL), knowing how to identify different types of ASL Classifiers, and application of ASL Classifiers. Students will learn and apply the three types of classifiers, learn and use the representative classifiers (animate and inanimate), descriptive classifiers (size-and-shape, extent, perimeter, and pattern and texture), and instrumental classifiers. This course will provide hands-on experiences and skill building activities needed for appropriate classifier use applied to complex descriptions and images. Eye gaze, role shifting, spatial referencing and appropriate use of ASL Classifiers in storytelling and different genres will also be covered. Co-requisite(s): ASL 101 and ASL 102 2 lecture hours per week 2 credit hours

ASL 200 – Academic American Sign Language
This course is designed to provide foundational development of students' vocabulary and language skills in several content areas used in education, business, and consultation settings. Students will be introduced to vocabulary genres such as medical, health, mathematics, science, engineering, technology, etc. Not limited to the above, other genres such as psychology, English, art, social services can be touched on. Along with application of the vocabulary, ASL linguistic features will be focused on numerical incorporation, indicating and depicting verbs, non-manual modifiers, grammatical aspects, use of fingerspelling as a semantic specification (flagging) and spatial mapping in appropriate ASL discourse structure. Co-requisite(s): ASL 103 and ASL 104 3 credit hours
ASL 201 – American Sign Language III
This course is a continuation of ASL II. It is designed to develop further competencies in ASL; expanding the emphasis on ASL grammar and vocabulary development as well as Deaf Community and culture. Students will experience additional in-depth receptive and expressive skill development. Development of advanced signing skills include topicalization of health, drug use, money/business, etc. Dialogue, short stories, narratives, and conversations will be featured throughout the course. Students will be required to interact with the Deaf Community in real-life situations enhancing their awareness, application, and sensitivity toward various aspects of ASL and Deaf Culture.
Prerequisite(s): ASL 103
Co-requisite(s): ASL 200 and ASL 205
3 lecture hours per week
3 credit hours

ASL 202 – American Sign Language IV
This course teaches students advanced conversational and discourse skills in American Sign Language and advanced and fine aspects of American Deaf Culture. Styles/Registers in ASL will be discussed on an advanced level. Development of advanced signing skills include topicalization of medical and sexual behavior, current events, dialogues, sign variants/differences, etc. Text and discourse analysis are also incorporated throughout the course. Prerequisite(s): ASL 201 and ASL 205
2 lecture and 2 laboratory hours per week
3 credit hours

ASL 205 – Linguistics of American Sign Language
Conducted in American Sign Language (ASL), the course is descriptive and data-oriented rather than theoretical. The course gives an historical overview of social and linguistic events that influence transformations in ASL; introduction to structure and organizational properties of ASL as identified through linguistic research; review of other languages that share similar organizational principles; discussion of semantic hierarchy and framework for analyzing semantic properties of ASL.
Prerequisite(s): ASL 103
Co-requisite(s): ASL 200 and ASL 201, or permission of Division Dean’s Office
1 lecture hours per week
1 credit hour

ASL 208 – American Deaf Culture and History
This course is a study of the status of Deaf people as both a linguistic and cultural minority group. This course is designed for individuals who may or may not have had prior experience with Deaf people. The course raises questions on the nature of sign language and its varieties, the education of Deaf people, the historical treatment of Deafness, the sociological and cultural make up of Deaf individuals, and the nature of ASL Literature and poetry. The course also covers the history of Deaf people in the Western World, with emphasis on the American Deaf Community and its relation to hearing society.
Prerequisite(s): ASL 201 and ASL 205
Co-requisite(s): ASL 202
3 lecture hours per week
3 credit hours

ASL 210 – American Sign Language and Deaf Literature
Students read and discuss in ASL various genres of American Sign Language and Deaf literature. Students develop basic skills in ASL Literature. Concentration is on the work of current, recognized narrators in both literacy and face-to-face storytelling traditions.
Prerequisite(s): ASL 201 and ASL 205, or permission of the Division Dean’s Office
3 lecture hours per week
3 credit hours

ASL 211 – Mentoring – Skills Development for American Sign Language-English Interpreters
This course is designed as a supervised mentoring for students with a certificate of completion or degree in ASL-English Interpreting or three years of experience as an educational interpreter. Students will design specific skill development goals to focus on during the course. Emphasis will be on application of lean and rich American Sign Language features, i.e., fingerspelling, vocabulary, use of space, classifiers, Prosody, Interpreting (ASL to English and English to ASL) in interpreting, based on the students’ specific skill development goals. Students will apply self-assessment tools for maintaining skills enhancement. Knowledge and skills sets in ASL/English interpreting may include Bilingual/multilingual skills, meaning management skills (interpreting/translating), ethical and professional decision-making, professional management and business skills, and/or new specialization, i.e., medical, business, mental health, legal interpreting, or working towards a certification.
Prerequisite(s): Permission of Division Dean’s office
3 credit hours

ASTL • Astronomy Lab
ASTL 101 – Astronomy of the Solar System Lab
This is a co-requisite laboratory course for AST 101.
Corequisite(s): AST 101
3 lecture hours and 3 laboratory hours per week
4 credit hours

AST • Astronomy
▲ AST 101 – Astronomy of the Solar System
This course provides a survey of the nature and underlying physics of all the solar system objects: sun, planets, satellites, asteroids, comets, and meteoroids. Astronomical discoveries are put into historical perspective. Experiments are carried out in the William Miller Sperry Observatory to determine the mass of the earth, phases of the moon and Venus, and more, using only high school math. Topics in optics, motion, heat, and properties of states of matter are introduced. The use of sky charts and coordinate systems is presented. Certain labs can only be completed at Sperry Observatory on the Cranford campus – students unable to come to the Observatory for these labs can opt to do alternate labs.
Prerequisite(s): ENG 096, if required
Corequisite(s): ASTL 101
3 lecture hours and 3 laboratory hours per week
4 credit hours

▲ AST 102 – Astronomy Beyond the Solar System
This course, which does not require any prior astronomy, provides a survey of the nature and underlying physics of objects outside the solar system, including stars, constellations, galaxies, and the universe. The brightness and spectral (color) classes of stars are investigated along with the life history of typical stars. The course then covers how stars are clustered into galaxies, and the relationships of galaxies to each other in the universe. In the William Miller Sperry Observatory, the telescope is employed to examine spectral lines of stellar gases. These lines tell us the stuff of which stars are made. Additional experiments cover items such as constellations, classification of stars, the Milky Way, and the structure of the universe. In doing the experiments using basic math, students discover anew what great astronomers of the past have found. Topics in optics, heat, gas laws, forces, relativity, and the atom are introduced. Certain labs can only be completed at Sperry Observatory on the Cranford campus – students unable to come to the Observatory for these labs can opt to do alternate labs.
Prerequisite(s): ENG 096, if required
Corequisite(s): ASTL 101
3 lecture hours and 3 laboratory hours per week
4 credit hours
**AUT 100 – Automotive Fundamentals**

This course is an introduction to basic automotive fundamentals. Students will be taught safety, computer software and information retrieval from service manuals and business-based software programs, basic hand tools, power tools, specialty tools, and their uses and applications. Fasteners and thread repair techniques will also be covered. Basic car component identification, services, and maintenance will also be presented to the students. This is an introduction to familiarize new students with prior automotive background and is a requirement before entering the Automotive Technology Program. The ability to test out of this course will be offered to students with prior automotive experience.

**Co-requisite(s):** AUTL 100

3 lecture and 3 laboratory hours per week

4 credit hours

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**AUT 103 – Brake Systems**

The brake course prepares the student to diagnose and repair brake systems in the automotive field. This course builds upon the essential laws of physics, motion, forces, hydraulics, thermodynamics, and chemical reactions, and how these principles apply to the operation of the automotive brake system. The course will cover the energy conversion of motion changed to heat energy (when brakes are applied), the effects of weight and speed on braking and stopping distance, thermal expansion, friction, force, and coefficient of friction, as they apply to braking systems. The course covers the fundamentals and service of disc/drum brakes; including, how they operate, brake-fluid properties, diagnosis, component replacement/repair/adjustment, disc/drum machining, power-assist units, and the fabrication (double flaring) of brake lines. The student will learn strategy-based diagnostic routines for interpreting and verifying customer concerns and proper operation. Through the inspection, testing, or measurement of component(s) operation, the student will learn to apply this knowledge to determine needed repair(s) and to implement the repair(s).

**Prerequisite(s):** AUT 100, or equivalent experience and approval of Division

**Co-requisite(s):** AUTL 103

3 lecture and 3 laboratory hours per week

4 credit hours

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**AUT 121 – Engine Repair**

This course covers the manual drive train and the components that are individually part of it. Components are front wheel, rear wheel drive, four wheel drive, and all-wheel drive transmissions systems. The power delivery to the wheels through the clutch, transmission, differential and drive shafts are part of this course. Theory, noise diagnostics and overhaul procedures will be covered within this phase. Constant velocity axles and drive shaft overhaul will be covered as well. Included within this module will be a section on diagnostics, noise, and vibration causes and repairs.

**Prerequisite(s):** AUT 100, or equivalent experience and approval of Division

**Co-requisite(s):** AUTL 102

3 lecture and 3 laboratory hours per week

4 credit hours

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**AUT 122 – Automotive A/C & Heating**

This course is designed to introduce the student to the basic theories and principles of refrigeration and their applications in the automotive air conditioning and heating system. The student will study the basic theories and principles of refrigerant, safety and environmental concerns, and the related tools and equipment needed to service these systems. The student will learn the associated electrical system controls and operations that allow air delivery, filtration, and temperature control into the automobile. The cooling system in relation to the heating system of the automobile will be covered. The student will perform related hands-on tasks to recharge, evacuate, purge, and diagnose heating and A/C problems. Included in this course will be the information and test for handling automotive refrigerant.

**Prerequisite(s):** AUT 121

**Co-requisite(s):** AUTL 122

3 lecture and 3 laboratory hours per week

4 credit hours

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**AUT 201 – Engine Repair**

This course is designed to introduce the student to engine construction, diagnosis, and repair/rebuilding procedures. The student will learn the basic construction and operation of a four stroke engine, types, classifications, and ratings. Components, hardware, and service tools that are part of the short block assembly and valve train will be discussed. Engine sub systems; cooling, lubrication, starting, fuel, and emissions will be included within engine repair. Engine overhaul procedures and common engine mechanical repairs will be taught during this phase. An engine teardown, measurement, analysis, and reassembly will be a requirement of the course. Diagnosis and troubleshooting engine mechanical problems will be covered in this phase.

**Prerequisite(s):** AUT 100, or equivalent experience and approval of Division

**Co-requisite(s):** AUTL 201

3 lecture and 3 laboratory hours per week

4 credit hours
AUT 202 – Automotive Electrical 2
This course will build on the basic applied electrical principles from Automotive Electrical 1, and apply them to individual systems of the automobile. A diagnostic strategy will be developed to allow the student to be able to diagnose and repair electrical problems. The horn, lighting, wiper and washer systems, and airbag will be covered as well as dash instrumentation, motorized accessories, and electronic controls within the automobile. Different electronic waveforms and the test equipment to monitor them will be discussed. Diagnostic procedures and computer flowchart diagnostics will enable the student to test electronic modules and sensors within the automobile. New electronic technology will be introduced in this phase as it is developed. Prerequisite(s): AUT 100 and AUT 121
3 lecture and 3 laboratory hours per week 4 credit hours

AUT 203 – Automatic Transmission
This course is an introduction to automatic transmissions and transaxles. Applying the previously learned information from Manual Drive Trains, Automatic Transmissions will cover the hydraulic principles and the components that allow this transmission to shift automatically. Mechanical components, fluid transfer, circuitry, and testing will be part of this course. Pressure testing and overhauling a transmission will be a requirement. Electronic transmission shifting, lock-up, and diagnostics through a scanner will be covered.
Prerequisite(s): AUT 102
3 lecture hours and 3 laboratory hours per week 4 credit hours

AUT 204 – Automotive Drivetrains
This course covers the drivetrain and the components common in today’s automobile. Covered topics include front-wheel drive, rear-wheel drive, four-wheel drive, and all-wheel drive transmissions systems. The power delivery to the wheels through the clutch, torque converter, transmission, differential, and drive axles are part of this course. Theory and common maintenance procedures will be covered. Constant-velocity axles and driveshaft overhaul will be covered. Included will be a section on diagnostics, noise, and vibration causes and repairs.
Prerequisite(s): AUT 100 and AUT 121
3 lecture and 3 laboratory hours per week 4 credit hours

AUT 232 – Automotive Engine Performance 2
This course will build on the introduction of engine performance by expanding on the sections for more in-depth coverage of the new systems on an automobile. Course coverage will include various electronic ignition systems, fuel injection systems, and computer controls that affect emissions. An introduction to OBD 1 and OBD 2 systems will also be covered. Diagnostics and repair of these systems with computer-based technology will enhance this course.
Prerequisite(s): AUT 122 and AUT 131
3 lecture hours per week 3 credit hours

AUT 290 – Co-op Education Experience in Automotive Technology
This course is a work-externship comprising approximately 200 hours of employment related to automotive technology with a dealership, independent or specialty auto shop, chain store, municipality, fleet or corporate facility. 200 contact hours
3 credit hours

AUTL 100 – Automotive Fundamentals Laboratory
This is a co-requisite laboratory course for AUT 100.
Co-requisite(s): AUT 100
3 laboratory hours per week 3 credit hours

AUTL 101 – Steering/Suspension Systems Laboratory
This is a co-requisite laboratory course for AUT 101.
Co-requisite(s): AUT 101
3 laboratory hours per week 3 credit hours

AUTL 102 – Manual Drive Trains Laboratory
This is a co-requisite laboratory course for AUT 102.
Co-requisite(s): AUT 102
3 laboratory hours per week 3 credit hours

AUTL 103 – Brake Systems Laboratory
This is a co-requisite laboratory course for AUT 103.
Co-requisite(s): AUT 103
3 laboratory hours per week 3 credit hours

AUTL 121 – Automotive Electrical 1 Laboratory
This is a co-requisite laboratory course for AUT 121.
Co-requisite(s): AUT 121
3 laboratory hours per week 3 credit hours

AUTL 122 – Automotive A/C & Heating Laboratory
This is a co-requisite laboratory course for AUT 122.
Co-requisite(s): AUT 122
3 laboratory hours per week 3 credit hours

AUTL 131 – Automotive Engine Performance 1 Laboratory
This is a co-requisite laboratory course for AUT 131.
Co-requisite(s): AUT 131
3 laboratory hours per week 3 credit hours

BIO 101 – Introduction to Biology
This is a one semester introductory course covering basics of life sciences, including the scientific method, origin of life, the cell, energy processes, genetics, evolution, and other topics which can be applied to everyday living.
This course does not fulfill the Biology elective requirements for Biology majors.
Co-requisite(s): BIOL 101
3 lecture hours and 3 laboratory hours per week 4 credit hours

BIO 102 – Human Biology
This course is an introduction to human anatomy and physiology for the non-Biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Not open to students who have taken BIO 105/BIO 106.
Co-requisite(s): BIOL 102
3 lecture and 3 laboratory hours per week 4 credit hours
BIO 103 – Environmental Science
This course is a study of biological and ecological principles and the interaction of humans with the biosphere. Population growth, technology, and the overuse and abuse of natural resources are covered in terms of their contributions toward the degradation of environmental quality. The ethical implications of how humans will deal with these environmental problems are investigated. One or two all day field trips on weekends may be required in lieu of some regularly scheduled laboratory sessions. If a student cannot attend a field trip on a weekend, an alternate learning experience will be assigned to replace the missed field trip.
Co-requisite(s): BIOL 103
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 104 – A Survey of the Animal Kingdom
This is a one-semester survey course of animals. The course will cover the structure, function, and ecology of the major animal groups. Emphasis will be placed on the importance and interaction of these animals to humans. One or more all day field trips on a weekend may be required in lieu of some regularly scheduled lab sessions.
Co-requisite(s): BIOL 104
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 105 – Anatomy and Physiology I
This course will introduce students to fundamental concepts connected with the integrated activity of the human body in relation to its environment. Each organ system of the human body is studied from the perspective of structure, processes, and regulation. The course covers an introduction to the study of anatomy and physiology, basic chemistry, cytology, histology, the integumentary system, the skeletal system, the muscular system, and the nervous system. The course will also foster in the student an attitude of scientific inquisitiveness and reasoning.
Prerequisite(s): ENG 097, if required
Corequisite(s): BIOL 105
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 106 – Anatomy and Physiology II
This course is a continuation of Anatomy and Physiology I and is intended to complete the two-semester sequence. The course will examine the following topics: the endocrine system, the respiratory system, the cardiovascular system, the digestive system, the urinary system, and the reproductive system. In addition, this course will introduce the student to some fundamental concepts connected with the integrated activity of the human body in relation to its environment. It will also foster an attitude of scientific inquisitiveness and reasoning.
Prerequisite(s): BIOL 105
Co-requisite(s): BIOL 106
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 107 – Decisions for Wellness
This is a one-semester course for non-Biology majors that focuses on wellness and several quality of life issues. The course will also discuss disease prevention and functioning optimally on a daily basis in order to enhance one’s life now as well as in the future. There is no dissection required in this course.
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 108 – Microbiology
This course is a study of microbial life on earth including microbial cell biology, growth and metabolism, genetics, diversity and evolution, effects on the environment, and the interactions between microorganisms and higher forms of life. Emphasis will be placed on the relationship between microorganisms and humans and current efforts to track and control infectious diseases worldwide.
Prerequisite(s): BIOL 105, or one semester of college-level chemistry
Corequisite(s): BIOL 108
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 110 – Human Heredity
This is a one-semester introductory course for non-Biology majors focused on basic human genetics and evolutionary theory. Students will learn modern concepts of heredity and evolution, and their impact and application on everyday life. One all day field trip on a weekend may be required in lieu of some regularly scheduled sessions.
Corequisite(s): BIOL 110
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 111 – General Biology I
This course, designed for Biology majors, focuses on the study of the cell as the basic unit of structure and function of all living organisms. The student is introduced to important hypotheses and concepts of modern cell biology (including those relevant to cell chemistry, cell architecture and function, genetics, and the origins of cellular life) as well as techniques and methods for studying cells.
Prerequisite(s): ENG 097, if required
Corequisite(s): BIOL 111
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 112 – General Biology II
This course, designed and required for Biology majors, is a basic introduction to the structure and function of representative types of plants and animals emphasizing the problems facing all multicellular organisms and the variety of solutions which have evolved. The course stresses the evolution of organ systems from simple to complex species.
Prerequisite(s): ENG 097, if required, and BIO 111 or approval of Division
Corequisite(s): BIOL 112
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 113 – Plants, People, and Society
This course studies how, why, and where plants grow and the direct and indirect effects they have on diverse cultures around the world. Life on Earth, including human life, depends on green plants. The development of civilization has paralleled the use and domestication of plants for food, fiber, medicine, fuel, and ornamentation. Students will learn how the use of plants has shaped the modern world and the civilizations from which our societies have evolved. Emphasis will be placed on current events related to plant science and society, including but not limited to plants as sources of medicine and how plants can feed an ever-increasing human population.
Prerequisite(s): ENG 097, if required
Corequisite(s): BIOL 113
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 120 – Introduction to Biology
BIO 101 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 121 – Human Biology
BIO 102 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours
BIO 122 – Biology of People and the Environment
BIO 103 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 123 – A Survey of the Animal Kingdom
BIO 104 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 124 – Anatomy and Physiology
BIO 112 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 125 – Anatomy and Physiology II
BIO 113 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 126 – Microbiology
BIO 108 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 127 – General Biology I
BIO 111 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 128 – General Biology II
BIO 112 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 129 – General Biology III
BIO 114 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

BIO 211 – Medicinal Plants
This course will focus on the use of plants for medicinal and other purposes. Topics include poisonous plants, medicinal plants from different cultures and cross-cultural aspects of plants and medicines; chemistry and biological significance of natural products; and natural products from plants in modern medicine.
Prerequisite(s): BIO 111 and BIO 112, or approval of Division
3 lecture hours per week
3 credit hours

BIO 204 – Introduction to Marine Biology
This is an introductory survey of the marine environment. The course introduces biological, chemical, and physical processes and how these ideas are derived. Biological adaptations to the various marine habitats will be stressed. Certain labs will be conducted as all-day field experiences on weekends.
Co-requisite(s): BIO 204
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 208 – Ecology
This is an introduction to basic ecological principles and techniques. Biotic inter-relationships are emphasized in the study of aquatic and terrestrial communities. The laboratory combines field investigations with experimental studies. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions.
Co-requisite(s): BIO 208
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 210 – Hydroponics
This course covers the fundamentals of hydroponics: a growing system using water, light, and nutrients but no soil. An overview of global hunger, plant physiology, and sustainability will be included. This course also includes a hands-on experiment that includes designing and building a hydroponic system, budgeting, statistics, and growing microgreens.
Prerequisite(s): BIO 113, or approval of Division
Co-requisite(s): BIO 210
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 211 – Medicinal Plants
This course will focus on the use of plants for medicinal and other purposes. Topics include poisonous plants, medicinal plants from different cultures and cross-cultural aspects of plants and medicines; chemistry and biological significance of natural products; and natural products from plants in modern medicine.
Prerequisite(s): BIO 111 and BIO 112, or approval of Division
3 lecture hours per week
3 credit hours

BIO 240 – Genetics
Genetics is the study of an organism’s biological information. This includes how organisms use biological information to survive and how biological information is passed to progeny. Students will explore inheritance, gene structure, gene function, gene mutation, and ethical issues related to genetics. Laboratory is included. Additionally, students will develop skills in critical thinking, scientific inquiry, problem solving, and scientific communication.
Prerequisite(s): BIO 111 and BIO 112, or approval of Division
Co-requisite(s): BIO 240
3 lecture and 3 laboratory hours per week
4 credit hours

BIO 101 – Introduction to Biology Laboratory
This is a co-requisite laboratory course for BIO 101.
Co-requisite(s): BIO 101

BIO 102 – Human Biology Laboratory
This is a co-requisite laboratory course for BIO 102.
Co-requisite(s): BIO 102

BIO 103 – Environmental Science Laboratory
This is a co-requisite laboratory course for BIO 103.
Co-requisite(s): BIO 103

BIO 104 – A Survey of the Animal Kingdom Laboratory
This is a co-requisite laboratory course for BIO 104.
Co-requisite(s): BIO 104

BIO 105 – Anatomy and Physiology I Laboratory
This is a co-requisite laboratory course for BIO 105.
Co-requisite(s): BIO 105

BIO 106 – Anatomy and Physiology II Laboratory
This is a co-requisite laboratory course for BIO 106.
Co-requisite(s): BIO 106

BIO 107 – Decisions for Wellness Laboratory
This is a co-requisite laboratory course for BIO 107.
Co-requisite(s): BIO 107

BIO 108 – Microbiology Laboratory
This is a co-requisite laboratory course for BIO 108.
Co-requisite(s): BIO 108
BLC 171 – Blockchain Fundamentals

This course provides students with a fundamental yet broad overview of the essential concepts of the blockchain industry, the history, the philosophy of decentralization behind blockchain, and the main discussions happening within the blockchain environment. Topics covered in the Blockchain Fundamentals course include a basic understanding of the functions of blockchain. Students will learn about potential applications of blockchain and the impact it could have on the business world.

3 lecture hours per week
3 credit hours

BLC 232 – Blockchain Technologies

This course provides students with a deeper understanding of blockchain technologies and their respective applications. Blockchain Technologies examines in depth the capabilities and limitations of the technology, enabling students to assess which business problems it can solve. Topics covered include how blockchain is used to transform contemporary businesses, and how to think about blockchain and its capabilities. Students will discover the problems blockchain technologies aim to solve and determine how they can support business goals and objectives.

Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

BLC 270 – Blockchain Decision Making

This course provides students with an understanding of blockchain decision making, and the knowledge to discern what types of business organizations are suitable for blockchain technology. This course helps students understand how blockchain decision making adds value to businesses, and covers topics on decision-making strategies, knowledge of tools and the different protocols used in decision making. The course also helps understand the various conditions and processes under which blockchain decision making occurs in business.

Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

BSM 205 – Sports in Society

This course offers a global, issues-oriented approach to sports. The emphasis is on sports and sport-related actions as they occur in social and cultural contexts. Topics include the influence sports have on children and young adults, violence, gender, social class, and ability, media, politics, and race and ethnicity.

Prerequisite(s): BSM 101 and ENG 101
3 lecture hours per week
3 credit hours

BSM 210 – Sport & Law

This course examines legal issues affecting the safe development and delivery of sport and physical activity programs. Major topics include equal opportunity legislation, tort liability, product liability, participant liability, and the legal rights and obligations of supervisors and participants. In addition, the course examines the laws and regulations which govern the business of sport and sport organizations.

Prerequisite(s): BSM 101 and ENG 101
3 lecture hours per week
3 credit hours

BSM 220 – Current Issues in Sports

This course offers a comprehensive study of current issues in sports. A strong emphasis will be placed on current economic issues confronting sports at every level. Issues will be explored in light of cultural and social contexts. Topics include performance enhancing drug use in all levels of sport, the modern sports facility pricing out the ordinary fan, corporations taking over the Olympics, the influence of corporations on what sports are produced and televised, the influence of money on college sports, the winning at all costs mentality, the challenges for women’s professional sports leagues, media influences on sports, new media technology and its impact on sports, fantasy sports, and the significant issues of youth sports.

Prerequisite(s): ENG 101
3 lecture hours per week
3 credit hours

BUS 101 – Introduction to Contemporary Business

This course provides an overview of all phases of business, including ownership, marketing, personnel, finance, managerial controls, and the relationship between business and government. Topics include the relationship of business to the social and economic environment in which it operates and a practical orientation and emphasis on relationships between business concepts and potential business careers.

3 lecture hours per week
3 credit hours
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 105 - Organization and Management</td>
<td>This course explores the background and development of the structure and functions of modern business; principles of organization and management; functions of major departments of the modern industrial enterprise and analysis of their interrelations and interdependence; methods of executive control and applications of basic principles. Prerequisite(s): ENG 097, if required</td>
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<td>3 lecture hours per week</td>
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<tr>
<td>BUS 107 - Human Resources Management</td>
<td>This course provides a study of the techniques of human resource management; job analysis and evaluation; recruitment, interviewing, placement, training, and education; employee health and safety, benefits and morale; public and community relations; personnel research, audits, and reviews. Prerequisite(s): ENG 097, if required</td>
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<td>3 lecture hours per week</td>
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<tr>
<td>BUS 110 - Business and Technology</td>
<td>This course explores how technology influences all aspects of business and industry including societal issues surrounding their use. Some of the topics include current computer technology and terminology, the Internet, societal issues related to digital media, mobile devices, and wireless devices. Emerging technologies will be explored. Prerequisite(s): ENG 097, if required</td>
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<tr>
<td>BUS 115 - Personal Finance</td>
<td>This course is designed to give a practical introduction to personal finance. It addresses realistic ways to manage personal assets effectively. Topics covered include the economy, working, planning, and budgeting; sensible shopping and spending; avoiding fraud and swindles; buying, insuring and financing a car; buying and selling a home; housing costs and regulations; renting a home; banking services; credit and borrowing; investments in stocks, mutual funds and real estate; life, health and income insurance; retirement and estate planning; and income tax.</td>
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<td>3 lecture hours per week</td>
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<tr>
<td>BUS 136 - Retailing Techniques</td>
<td>This course examines the function of the retailer. Topics include retail establishments and the changes in merchandising, management techniques, organizations, effective control, and profitable operation. Prerequisite(s): ENG 097, if required</td>
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<td>3 lecture hours per week</td>
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<tr>
<td>BUS 137 - Salesmanship</td>
<td>This course provides a study of the effective methods of retail selling and the application of psychological and persuasive selling techniques. Students prepare and conduct sales presentations on an individual and group basis. Prerequisite(s): ENG 097, if required</td>
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<tr>
<td>BUS 138 - Retail Buying and Merchandising</td>
<td>This course introduces the student to the organizational structure at the retail buying and merchandising function. The various techniques for coordinating an effective buying and merchandise program are studied.</td>
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<tr>
<td>BUS 200 - Small Business Management</td>
<td>This course is designed to introduce the student to the principles of small business management and the functions of planning, organizing, financing, staffing, marketing, and directing a small business enterprise.</td>
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<tr>
<td>BUS 201 - Business Law I</td>
<td>This course provides a study of the legal aspects of common business transactions, including judicial procedures, contracts, torts, crimes, and agency law. Prerequisite(s): ENG 097, if required</td>
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<td>3 lecture hours per week</td>
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<tr>
<td>BUS 202 - Business Law II</td>
<td>This course provides a study of the Uniform Commercial Code and legal aspects of sales, negotiable instruments, corporations, partnerships, real and personal property, government regulation of business, bankruptcy, insurance, and inheritance. Prerequisite(s): ENG 097, if required</td>
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<td>3 lecture hours per week</td>
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<tr>
<td>BUS 203 - Principles of Advertising</td>
<td>This course provides a study of the Uniform Commercial Code and legal aspects of sales, negotiable instruments, corporations, partnerships, real and personal property, government regulation of business, bankruptcy, insurance, and inheritance. Prerequisite(s): ENG 097, if required</td>
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<tr>
<td>BUS 204 - Principles of Finance</td>
<td>This course provides a study of the fundamentals of finance. Topics include financial analysis; planning and control; working capital management including bank and non-bank financing; time value of money; capital. Prerequisite(s): ACC 103 and ECO 201</td>
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<tr>
<td>BUS 205 - Principles of Marketing</td>
<td>This course provides a study and evaluation of procedures and institutions involved in the movement of goods from producers to consumers. Students analyze procedures and practices of wholesalers and retailers in relation to the current economic, social, and political environment.</td>
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<tr>
<td>BUS 208 - Principles of Marketing</td>
<td>This course provides an introduction to the theory and practice of international business. Topics include theory of international trade, international investment and monetary system, international marketing, management, finance, foreign exchange markets, importing, exporting, trade agreements, NAFTA, GATT, trade barriers and the EU.</td>
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<tr>
<td>BUS 209 - Introduction to Global Business</td>
<td>This course examines the historical foundation of cultural, political, and economic diversity and its effect on marketing. Topics include forces related to the emergence of the global marketplace, trade liberalization, advances in communications, the role of mass media in introducing the ideas and the lifestyles of other cultures, and transport technology. Prerequisite(s): ENG 097, BUS 101, and BUS 208</td>
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<tr>
<td>BUS 210 - Marketing and the Global Environment</td>
<td>This course examines the historical foundation of cultural, political, and economic diversity and its effect on marketing. Topics include forces related to the emergence of the global marketplace, trade liberalization, advances in communications, the role of mass media in introducing the ideas and the lifestyles of other cultures, and transport technology. Prerequisite(s): ENG 097, BUS 101, and BUS 208</td>
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<tr>
<td>BUS 215 - Excel for Business</td>
<td>This course offers students the opportunity to master the advanced functionality of Microsoft Excel, and to apply those skills to genuine business applications and office management tasks. The course will enhance students’ reporting skills such as analyzing and charting financial data. Students build a worksheet from a beginning level to an intermediate level. The course is project-based and provides real world analysis of company sales, inventory valuation, and revenue reporting. Prerequisite(s): ENG 097, if required</td>
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<td>3 lecture hours per week</td>
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▲ = Fulfills a General Education Requirement
BUS 216 – Access for Business
This course prepares students to solve business problems by moving beyond the basic point-and-click skills and to think critically about realistic business situations. In this course, students combine software analysis with their own decision-making abilities to meet business challenges with success. Students are introduced to a relational database software that allows the student to organize and report on business data. Students create a database and learn to maximize productivity. Some of the topics included are creating a database; organizing and retrieving business data; working with tables; creating queries and advanced queries; developing reports for accounting and sales; entering criteria; sorting; structure; validation; referential integrity; and macros.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

BUS 223 – Introduction to Entrepreneurism
This course provides a clear and comprehensive introduction to business skills and principles, which support independent business innovation, ownership, and management. This course departs from traditional small business management courses by incorporating new themes and principles of management more appropriate to self-conceived and self-directed small business innovators striving to survive in a dynamic global and technological business environment. Topics include the innovative process, creating and retrieving business data; working with tables; creating queries and advanced queries; developing reports for accounting and sales; entering criteria; sorting; structure; validation; referential integrity; and macros.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

BUS 290 – Co-op Education Experience in Business
This course is an externship of approximately 200 hours in a business position with a local business or industry with or without compensation. If an externship cannot be arranged, a term project on or off campus will be assigned. A weekly seminar on campus is included. An elective may be substituted. This course is only open to matriculated students in the A.A.S. and A.S. degree business programs. Students should take this course in their last year of the program.
Prerequisite(s): Division approval required
200 contact hours
3 credit hours

BUS 346 - Developing Managerial Competence
This course includes both theoretical and practical aspects of management. It provides a hands-on approach to improving a student’s ability to successfully manage employees in the workplace. Effective business practices for a variety of management challenges will be emphasized.
Prerequisite(s): BUS 101
3 lecture hours per week
3 credit hours
This advanced-level course is part of the 3+1 partnership with Berkeley College. The course is only available to students who completed an associate degree in business management and are accepted at Berkeley College.

CHE • Chemistry

▲ CHE 101 – College Chemistry
This course is primarily intended for non-science majors. CHE 101 is the study of the chemical view of matter, atomic structure and theory, chemical bonding, stoichiometry, oxidation reduction, and solutions.
Prerequisite(s): CHEL 101
3 lecture and 3 laboratory hours per week
4 credit hours

▲ CHE 103 – Chemistry-Health Sciences
This course is primarily intended for students pursuing Nursing and Health Science Degrees. CHE 103 is a study of selected topics in general, organic, and biological chemistry oriented toward health sciences. Students who have not had high school chemistry are recommended to take CHE 101. Students pursuing the Bachelor’s Degree in Nursing are recommended to take CHE 114.
Prerequisite(s): CHEL 103
3 lecture and 3 laboratory hours per week
4 credit hours

▲ CHE 105 – Principles of Organic Chemistry
This course is primarily intended for students pursuing Nursing and Health Science Degrees. CHE 105 is a study of selected topics in general, organic, and biological chemistry oriented toward health sciences. Students who have not had high school chemistry are recommended to take CHE 101. Students pursuing the Bachelor’s Degree in Nursing are recommended to take CHE 114.
Prerequisite(s): CHEL 105
3 lecture and 3 laboratory hours per week
4 credit hours

▲ CHE 111 – General Chemistry I
This course is the first half of a two-semester course sequence designed primarily for Science and Engineering Students. CHE 111 is a systematic study of atomic structure, chemical bonding, molecular geometry, stoichiometry, states of matter, and solutions. Students who have not had high school chemistry are recommended to take CHE 101.
Prerequisite(s): CHEL 111
3 lecture and 3 laboratory hours per week
4 credit hours

▲ CHE 112 – General Chemistry II
This course is the second half of a two-semester course sequence designed primarily for Science and Engineering Students. CHE 112 is a study of the chemical view of matter, atomic structure and theory, chemical bonding, stoichiometry, oxidation reduction, and solutions.
Prerequisite(s): CHEL 111, or approval of Division
Prerequisite(s): CHEL 112
3 lecture and 3 laboratory hours per week
4 credit hours

▲ CHE 113 – Principles of Inorganic Chemistry
This course is primarily intended for non-science majors. CHE 113 is a study of general and inorganic chemistry including elements, compounds, mixtures, atomic structure, gas laws, solutions, acids and bases, radioactivity. Students who have not had high school chemistry are recommended to take CHE 101.
Prerequisite(s): CHEL 113
3 lecture and 3 laboratory hours per week
4 credit hours

▲ CHE 114 – Principles of Organic Chemistry and Biochemistry
This course is primarily intended for students pursuing Nursing and Health Science Degrees. CHE 114 is an introductory study of the basic concepts of organic and biochemistry oriented toward the health-related fields. Topics include nomenclature, reactions, and stereochemistry of the major classes of organic compounds; the basic chemistry of carbohydrates, proteins, lipids, nucleic acids, and enzymes in relationship to the metabolism of living organisms. Students who have not had high school chemistry are recommended to take CHE 101.
Prerequisite(s): CHEL 114
3 lecture and 3 laboratory hours per week
4 credit hours
CHE 120 – College Chemistry
This course is CHE 101 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHE 122 – Chemistry-Health Sciences
This course is CHE 105 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHE 125 – General Chemistry I
This course is CHE 111 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHE 126 – General Chemistry II
This course is CHE 112 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHE 127 – Principles of Inorganic Chemistry
This course is CHE 113 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHE 128 – Principles of Organic Chemistry and Biochemistry
This course is CHE 114 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHE 211 – Organic Chemistry I
This is the first half of a two-semester course sequence designed primarily for Science and Engineering Students. CHE 211 is a study of the principal classes of aliphatic and aromatic compounds, types of reactions and reaction mechanisms, molecular orbital approach to bonding, and stereochemistry.
Prerequisite(s): CHE 112, or approval of Division
Co-requisite(s): CHEL 211
3 lecture and 4 laboratory hours per week
5 credit hours

CHE 212 – Organic Chemistry II
This is the second half of a two-semester course sequence designed primarily for Science and Engineering Students. CHE 212 is a study of functional groups, reactions and reaction mechanisms, spectroscopic examination of organic compounds, and introductory biochemistry.
Prerequisite(s): CHE 211, or approval of Division
Co-requisite(s): CHEL 212
3 lecture and 4 laboratory hours per week
5 credit hours

CHE 221 – Organic Chemistry I
This course is CHE 211 without the laboratory component. This course is primarily intended for students who have completed the laboratory requirement at another institution. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the same course with laboratory. This course will not fulfill a college laboratory science requirement.
Prerequisite(s): Division approval required
3 lecture hours per week
3 credit hours

CHEL 113 – Principles of Inorganic Chemistry Laboratory
This is a co-requisite laboratory course for CHE 113.
Co-requisite(s): CHE 113

CHEL 111 – General Chemistry I Laboratory
This is a co-requisite laboratory course for CHE 111.
Co-requisite(s): CHE 111

CHEL 112 – General Chemistry II Laboratory
This is a co-requisite laboratory course for CHE 112.
Co-requisite(s): CHE 112

CHEL 107 - The Chemistry of Forensic Science Laboratory
This is a co-requisite laboratory course for CHE 107.
Co-requisite(s): CHE 107

CHEL 101 – College Chemistry Laboratory
This is a co-requisite laboratory course for CHE 101.
Co-requisite(s): CHE 101

CHEL 105 – Chemistry-Health Sciences Laboratory
This is a co-requisite laboratory course for CHE 105.
Co-requisite(s): CHE 105

Institutional Code: CHEL

= Fulfills a General Education Requirement
CHN 101 – Beginning Mandarin Chinese I
This course will provide students with a solid foundation in pronunciation, grammar, and proficiency in the four language skills of understanding, speaking, reading, and writing. Media are incorporated into classroom experience. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CHN 102 – Beginning Mandarin Chinese II
This course is a continuation of CHN 101. Emphasis is placed on expanding vocabulary and sentence patterns. Students will be expected to understand, speak, read, and write new words encountered in the textbook and other sources. Media will be incorporated into classroom experience. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.
Prerequisite(s): CHN 101, or 2 years high school Chinese
3 lecture hours per week
3 credit hours

CHN 111 – Intermediate Mandarin Chinese I
This course is designed to review and consolidate the fundamentals that students have built in their beginning Mandarin Chinese courses. Students will continue to expand their repertoire of grammatical structures and to build up vocabulary. This course will develop more reading, writing, listening and speaking skills so that students can apply Mandarin Chinese to good use in and beyond the classroom. Native speakers of Mandarin Chinese must get approval of the instructor.
Prerequisite(s): CHN 101 and CHN 102, or three years high school Chinese
3 lecture hours per week
3 credit hours

CHN 112 – Intermediate Mandarin Chinese II
This course is designed to review and consolidate the fundamentals that students have built in Beginning Mandarin Chinese courses and Intermediate Mandarin Chinese I. Students will continue to expand their repertoire of grammatical structures and to build up vocabulary. This course will develop more reading, writing, listening and speaking skills so that students can apply Mandarin Chinese to good use in and beyond the classroom. Native speakers of Mandarin Chinese must get approval of the instructor.
Prerequisite(s): CHN 111, or three years high school Chinese
3 lecture hours per week
3 credit hours

CIT 108 – Soil Mechanics
This course focuses on a study of soil as a basic construction material, including the relationship of geology to soil characteristics, the study of soil physics and the behavior of soil under various loading conditions. The course also covers the following topics: soil composition and terminology, properties and behavioral analysis under load, site exploration and sampling techniques, an introduction to environmental soil contamination and remediation, soil reinforcement and improvement methods, bearing capacity, shallow and deep foundations, consolidation and settlement, soil structures, soil erosion/sediment control during construction and common laboratory and field testing procedures.
Prerequisite(s): MAT 119
Co-requisite(s): CITL 108
2 lecture and 2 laboratory hours per week
3 credit hours

CIT 201 – Structural Design
This course is a study of the fundamentals of structural design and drafting. Applications in steel, reinforced concrete, and wood construction are covered. The student will learn to reference appropriate codes and specifications. Methods for selecting standard beams, columns, tension members, connections, and concrete reinforcing bars will be studied and practiced. Structural framing plans, details and shop drawings are also covered.
Prerequisite(s): CIT 210 and MET 109
3 lecture hours per week
3 credit hours

CIT 205 – Surveying
This is a course in plane surveying which includes the measurement of distances, elevations, angles and directions. Principles and field use of traditional and modern surveying instruments are covered in lecture and practiced in the laboratory and in the field. Fundamental surveying computations including the use of computers and surveying software are also covered.
Prerequisite(s): MAT 143 and MET 109
Co-requisite(s): CITL 205
3 lecture hours and 3 laboratory hours per week
4 credit hours

CIT 210 – Strength of Materials
This is a study of the relationship between the external forces on a body and the resulting internal stresses and deformations caused to that body. Topics include the mechanical/structural properties of materials, shear and moment diagrams, beam stresses and deflections, design of beams and columns, connections, and torsion in members. Calculations use units from both the English and SI (Metric) systems. Computer software programs are used to analyze and solve typical problems.
Prerequisite(s): MET 112
3 lecture hours and 1 laboratory hour per week
3 credit hours

CIT 214 – Construction Procedures
This course provides an introduction to heavy construction practices. Emphasis is on construction equipment, site preparation, earth-moving, compaction, dewatering, paving, drilling and blasting, and tunneling. Case studies in heavy construction are used. Sustainability of the construction process and materials will be integrated throughout the course with emphasis on recent advances and research in the area of green construction procedures, equipment and materials. Each procedure and type of equipment and material will be analyzed as to the overall properties of the material and its value relative to issues of sustainability (lifecycle costs/environmental stewardship/local resource).
Prerequisite(s): ENG 096, if required, MAT 143 and CST 115
3 lecture hours per week
3 credit hours
CLIT 215 – Fluid Mechanics
This course is a study of pressure, flow, and viscosity in fluids. Forces on submerged areas and buoyancy are computed. Friction losses in pipelines, valves and fittings are calculated, series piping systems are analyzed. Pumps are also sized. Applications include analysis of flow through non-circular sections. Computer software programs are used to analyze and solve typical problems.
Prerequisite(s): MET 112
3 lecture hours per week
3 credit hours

CITL 290 – Co-op Education Experience in Construction Engineering Technology
A work-externship comprising a minimum of 200 hours of employment related to surveying or civil/construction engineering technology, with a municipal engineering organization, a building contractor, surveyor, architect, or a private engineering firm. Prerequisite(s): Division approval required
200 contact hours
3 credit hours

CLPR 901 – Clinical Practicum I
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site for 12 weeks after completion of the introductory phase of 4 weeks at the school.
This is a graded course.

CITL 108 – Soil Mechanics Laboratory
This is a co-requisite laboratory course for CIT 205.
Co-requisite(s): CIT 108

CITL 205 – Surveying Laboratory
This is a co-requisite laboratory course for CIT 205.
Co-requisite(s): CIT 205

CLPS 901 – Clinical – Sonography, Muhlenberg
Student observes, assists with and performs procedures in the clinical setting. This course allows for further development of ultrasound examination skills by means of a clinical internship. Performing basic, general ultrasound examinations in both the laboratory and clinical settings is stressed. The student is expected to perform basic examinations with little, if any, assistance by the end of this course.
This is a graded course.

CLPR 902 – Clinical Practicum II
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site for 15 weeks.
This is a graded course.

CLPR 903 – Clinical Practicum III
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site for 6 weeks.
This is a graded course.

CLPR 904 – Clinical Practicum IV
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site and 2 days per week of clinical related seminars for 6 weeks.
This is a graded course.

CLPR 905 – Clinical Practicum V
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site for 13 weeks.
This is a graded course.

CLPR 906 – Clinical Practicum VI
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site for 15 weeks.
This is a graded course.

CLPR 907 – Clinical Practicum VII
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site and 2 days per week of clinical related seminars and reviews for 6 weeks.
This is a graded course. – non-credited.

CLPR 907 – Clinical Practicum VIII
Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Required participation includes 2 days per week at a contracted clinical education site and 2 days per week of clinical related seminars and reviews for 6 weeks.
This is a graded course.

CLPS 901 – Clinical Sonography I
This course prepares the student for the application of classroom knowledge to the practice of ultrasound by means of formal scanning labs combined with a clinical internship. Performing basic, general ultrasound examinations in both the laboratory and clinical settings is stressed. Patient care applications, ethical issues, and medicolegal considerations are discussed as they relate to the practice of an ultrasound examination and of the student's place in the clinical setting.
This is a graded course.

CLPS 902 – Clinical Sonography II
This course, a continuation from CLPS 901, further prepares the student for the application of classroom knowledge to the practice of ultrasound by means of a clinical internship. Performing basic, general ultrasound examinations in both the laboratory and clinical settings is stressed. The student is expected to perform basic examinations with little, if any, assistance by the end of this course.
This is a graded course.

CLPS 903 – Clinical Sonography III
This course allows for further development of ultrasound examination skills by means of a clinical internship. Various clinical examination competencies will be performed with no assistance by the end of this course.
This is a graded course.
CLPS 904 – Clinical Sonography IV
This course is designed to fine-tune the development of ultrasound examination skills by means of a clinical internship. The student is expected to perform general ultrasound examinations with little or no assistance. Performance of specialized ultrasound examinations at various clinical sites will begin and site-specific competency evaluations will be performed.
This is a graded course.

CLPS 905 – Clinical Sonography V
This course is the final development of ultrasound examination skills by means of a clinical internship. The student is expected to perform general ultrasound examinations with no assistance and specialized ultrasound examinations depending on the site of attendance and the approval of the designated clinical instructor.
This is a graded course.

COM • Communications

▲ COM 100 – Communications Technologies
This course is an introduction to the technologies that shape the communications field, with special emphasis on the creative enabling potential of computer applications and tools, the fundamentals of information literacy and the importance of critical thinking. Students will receive hands-on training in Microsoft Word and Microsoft PowerPoint, and develop the ability to apply these tools in concert with data gathering, evaluation and management skills, to critically address the challenges that they will face in their academic work, their careers and in their daily lives as citizens.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
4 credit hours

COM 101 – Mass Communications
This course provides a survey of the nature of contemporary mass media. Course includes an analysis and evaluation of the role of mass media in American life.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

COM 102 – Reporting and News Writing
This course provides instruction in gathering news and interviewing, practice in news writing.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

COM 103 – Introduction to Radio Broadcasting
This overview course is designed to introduce students to the principles of commercial radio broadcasting. Emphasis is placed on technical theory, programming and format, studio operation, radio sales, F.C.C. broadcast law, and production of audition tapes.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

COM 105 – Storytelling for Digital Media
This course explores the ways in which storytelling serves as an essential medium for human communication, with specific focus on its central role in the creation of video games, film and multimedia. Students will examine traditional narrative theory with special emphasis on its adaptation for interactive digital media. Topics will include world creation, back-story, plot and story arc, genre, character development, and dialogue. Emphasis will be placed on the craft of storytelling, and the demands of creative development in a collaborative project environment.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

COM 106 – Introduction to Television: Production and Theory
This course provides an introduction to the methods and equipment used in the production of television programs in a studio environment. This course includes discussion of the technical systems on which television is based. Students gain experience by assuming the role of producer/director and various crew positions such as floor manager, cameraman, etc. Students will take a critical look at television and its effect as a communications medium.
3 lecture hours per week
3 credit hours

COM 107 – Publication Editing and Design
This course provides instruction and practice in editing and layout for print publication. Emphasis is placed on coordinating graphic elements with text to develop effective print communications. Instruction includes computer applications. Microsoft Office and Adobe InDesign are used along with complementary image editing and illustration software.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

COM 108 – Principles and Practices of Public Relations
This course introduces the student to principles and practices of communication between the public and an individual or organization. Topics covered include mass media, planning, publicity, writing and ethics.
Prerequisite(s): Completion of all developmental English requirements
3 lecture hours per week
3 credit hours

▲ COM 109 – Introduction to Film Study
This course provides a study of selected films representing the development of the art of filmmaking. The course includes the study of both the technical and cultural elements of film production. Students will learn to think, speak and write about film and filmmaking.
3 lecture hours per week
3 credit hours

COM 112 – Multimedia Development I
This course introduces the student to use and development of multimedia and provides an introduction to the elements of multimedia design. Students will master the skills necessary to create a multimedia product, from content creation and design planning to the use of presentation management and Web design software. Students will be introduced to the Adobe Creative Suite, learning to incorporate audio, video, graphics and animation into rich media presentations using industry standard software.
3 lecture hours per week
3 credit hours

COM 113 – Audio Production I
This course provides an introduction to the skills and technologies that shape the audio production field. Special emphasis will be placed on the creative power of computer applications and tools. Students will receive hands-on training in the Mac and Windows environment using Adobe Audition and develop the ability to record and edit both simple and complex audio projects for the Music, Television, Film, and live sound reinforcement industries.
3 lecture hours per week
3 credit hours

COM 201 – Issues in Mass Media
This course provides an analysis of the role of the media and popular culture in the formation of our society, our beliefs and ourselves. Students will follow current topics in the media, analyze the media treatment of these issues and examine the present state of the media within its historical framework.
Prerequisite(s): ENG 097, if required, and COM 101
3 lecture hours per week
3 credit hours
COM 202 – Advanced Reporting and News Writing
This course focuses on the principles and problems of feature, beat, and specialty reporting. Students will learn how and where to find newsworthorthy stories, cultivate sources, and become responsible for a particular beat, feature column or specialty topic.
Prerequisite(s): ENG 097, if required, and COM 102, or permission of Division Dean’s office
3 lecture hours per week
3 credit hours

COM 206 – Television Field Production
This course provides instruction and practice in single camera field production and post-production editing. Emphasis is placed on coordinating audio and visual elements to communicate effectively to viewers.
Prerequisite(s): COM 106
3 lecture hours per week
3 credit hours

COM 207 – Advanced Publication Editing and Design
This course builds on material covered in COM 107. Further exploration of principles of attractive layout and design using Adobe InDesign and Adobe Photoshop. Emphasis is placed on teaching students to combine graphic elements with text to create attractive and journalistically-sound layouts.
Prerequisite(s): COM 107
3 lecture hours per week
3 credit hours

COM 209 – The Evolution of Film
This course provides a study of the cultural impact of film, and the effects of film portrayal upon the way in which we see ourselves and others. Students will develop skills and strategies for the analysis of film drawn from a wide variety of disciplines and approaches. Students will have the opportunity to participate in the creation of film and media projects of their own design.
3 lecture hours per week
3 credit hours

COM 212 – Multimedia Development II
This course introduces students to Multimedia Authoring. Students will expand their skills in content creation and manipulation using an array of industry software from the Adobe Creative Cloud Collection including Illustrator, imaging in Photoshop, web design in Dreamweaver, animation in Animate and Spark, and audio editing in Adobe Soundbooth. Application of this software will develop the multimedia professional’s toolkit.
Prerequisite(s): COM 112
3 lecture hours per week
3 credit hours

COM 213 – Audio Production II
This course is focusing on contemporary applications of all phases of audio production. Students will work on Mac and PC platforms and learn the fundamental and advanced applications of audio production in both the analog and digital domains. Subjects will include MIDI (Musical Instrument Digital Interface), samples and loops, digital editing, multitrack and sequencing programs including Adobe Audition and Pro Tools, microphone techniques, mixing consoles, software plug-ins and soft synths, mastering, 5.1 Surround Sound, as well as the basic elements of film scoring and syncing audio to film. Students will be prepared for further academic study in the field, and provided with a solid background in audio engineering and production.
Prerequisite(s): COM 113
3 lecture hours per week
3 credit hours

COM 216 – Digital Video Editing and Multimedia Imaging
In this course students will learn to compose and edit digital video using industry software tools including Adobe Premiere Pro. Students will be given the opportunity to edit their own video projects as well as work as team members on the video productions of their peers. Special emphasis will be placed on the use of digital video in film and multimedia projects. Students will discuss current technology trends and critically analyze professional and amateur video projects in order to gain insight into improving their own work.
3 lecture hours per week
3 credit hours

COM 290 – Co-op Education Experience in Communications
This course is a one-semester internship of approximately 135 hours in a business position with a local communications-related business or industry with or without compensation in order to acquire knowledge of industry and workplace relevant skills. This course is only open to matriculated students in the Communications, Media, Journalism and Public Relations A.A. degree programs. Students must arrange placement with the Division Dean prior to enrolling in the course.
135 contact hours
3 credit hours

CRJ 101 – Introduction to Criminal Justice
This course is an introduction to the background and history of law enforcement and the origin of laws. Topics include the causes of crime, the definition of a criminal, and critical areas of law enforcement as related to crime, public morals, and the public image.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 102 – Police Organization and Administration
This course is a survey of police organizational principles, a review of police administration past and present with an evaluation of its future. Societal changes impacting upon police are discussed in order to formulate strategies for dealing with trends impacting upon crime and disorder. The role of technology in modern police organization and administration is addressed.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 103 – Introduction to Forensic Procedure
This course provides a review of the fundamental techniques used in the analysis and evaluation of physical evidence, including micro-techniques, and special subjects of topical interest. Laboratory is included. The analysis of physical evidence using recent developments in non-instrumental and instrumental techniques is emphasized.
Prerequisite(s): ENG 096, if required
Co-requisite(s): CRJL 103
3 lecture and 3 laboratory hours per week
4 credit hours

CRJ 109 – Correctional Administration
This course examines the theories, methods, and practices in the administration of punishment with special emphasis on the re habilitation of the adult offender. Topics include the selection and training of personnel employed in the field and an exploration of the effort to classify inmates correctly and to reintegrate them back into society. An understanding of the social control of the offender is an integral aspect of the course.
3 lecture hours per week
3 credit hours

▲ = Fulfills a General Education Requirement
CRJ 201 – Police Management Systems
This course provides a review of leadership and management principles and practices, traditional and current, and an analysis of their effectiveness and their specific application to law enforcement. The three critical activities of leadership are discussed. Through lecture and case studies the students explore: planning, communications, decision-making, staffing, training, and team building.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 203 – Criminal Investigation
This course examines the methods of searching for truth and relevant information on criminal cases. Topics include the role of the police and criminal investigators in preliminary and follow-up investigation, interviewing techniques, and specialized investigative techniques relative to homicide, rape, robbery and arson. Legal responsibilities and general laboratory and scientific aids to investigation are also included.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 205 – Police Role in the Community
This course provides a survey of police history within the larger social context. Root causes of crime and disorder are explored in order to look at contemporary police responses. Topics include discussion of the working personality of the police officer with an emphasis on examining the relationship between the police and the community and an understanding of interpersonal relations and cultural diversity in our communities.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 206 – Criminal Law
This course examines the intricacies of the administration of criminal justice. Topics include the elements of common criminal status, the nature and difficulties of proof, the legal rules governing police practices and procedures, and an exploration of constitutional judicial decisions and important judicial case studies in the United States.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 207 – Special Police Operations
This course examines special police operations role and responsibilities. Students will explore issues related to K-9 officers, SWAT operators, hostage negotiations, homicide investigators, drug interdiction officers and other specialized police personnel. These law enforcement positions involve unique training, a specialized skill set, and a collection of challenges unique to that job is emphasized.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 208 – Community Supervision of the Offender
This course is a study of theories, practices and the problems of their integration into a meaningful program of supervision in the community for sentenced offenders. Topics include probation, parole, specialized programs, halfway houses, alternative programs, diversionary programs.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 223 – Homeland Security
This course examines the development, role and responsibilities of the U.S. Department of Homeland Security. Students will explore the techniques and practices that assist private, commercial and public establishments, particularly industrial plants, department stores, hospitals, schools, sports facilities and other public facilities where people congregate. Special problems such as espionage, terrorism, riots, natural disasters and pilgrimage will also be covered.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

CRJ 314 – Introduction to Intelligence
This course provides a comprehensive overview of Intelligence and security issues, defining critical terms and reviewing the history and trends of Intelligence as practiced in the United States, and explores the way the Intelligence community looks and operates today. Topics include the definition of Intelligence, the pillars of the American Intelligence system, collection, analysis, counter-intelligence, and other special operations.
Prerequisite(s): CRJ 101
3 lecture hours per week
3 credit hours

CRJ 315 – Terrorism and Counter-Terrorism
This course examines the history, evolution and causes of terrorism as a violent criminal behavior and focuses on counter-terrorism strategies. The course has an emphasis on the social and criminal justice responses needed to address violent crimes of this kind. Students will learn, discuss and explore the various responses that democratic governments take in combating terrorism.
Prerequisite(s): CRJ 101
3 lecture hours per week
3 credit hours

THIS ADVANCED-LEVEL COURSE IS PART OF THE 3+1 PARTNERSHIP WITH BERKELEY COLLEGE. THE COURSE IS ONLY AVAILABLE TO STUDENTS WHO COMPLETED AN ASSOCIATE DEGREE IN CRIMINAL JUSTICE AND ARE ACCEPTED AT BERKELEY COLLEGE.

CRJL • Criminal Justice Lab

CRJL 103 – Introduction to Forensic Procedure Laboratory
This is a corequisite laboratory course for CRJ 103.
Co-requisite(s): CRJ 103

CST • Computer Science and Technology

CST 100 – Introduction to Computer Applications
This course introduces students to basic computer concepts. The course also focuses on a current version of Microsoft Office Professional. Students experience hands-on instruction in word processing, spreadsheets, databases, and professional presentations. This course prepares students to succeed in both college and the business world by enabling them to write reports, analyze and chart data, and prepare presentations.
Prerequisite(s): ENG 096, and MAT 017 or MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 101 – Introduction to Information Systems
This course is an introduction to the many facets of computer information systems. The course provides an understanding of system concepts, information technology, and application software. It also introduces students to how information is used in organizations and how information technology enables improvement in quality and timeliness of information. It gives students the characteristics of professionals and of possible career paths. Topics include ethical and societal issues, organizing data and information, telecommunications and networks, e-commerce, and management information systems. The course supports the concept of problem solving with computers via applications and the Internet.
Prerequisite(s): ENG 096, and MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours
CST 111 – Integrating Technology in the Curriculum
This course provides students with an in-depth knowledge of how to integrate technology into educational environments. Topics include the Internet, introduction to productivity software applications for educators, hardware, analysis of technology, integrating multimedia and education software applications, using digital equipment in the classroom, and creating curriculum pages.
Prerequisite(s): ENG 096, and MAT 017 or MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours

▲ CST 115 – Introduction to Computer Programming
This course is an introduction to computers and programming. Topics include components of the computer system, problem solving techniques, processing data, manipulating files, creating mathematical functions, controlling processes using an industry standard programming language.
Prerequisite(s): ENG 096, and MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours

▲ CST 120 – The Internet
This course explores the Internet. Topics include conceptual background and online skills needed to become Internet literate, survey of emerging technologies on the Internet, ethics and etiquette of the Web, network protocols, basic UNIX commands, creating web pages, and using the Web to locate, transfer, and publish information.
Prerequisite(s): ENG 096, and MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 122 – Web Application Development
This course introduces students to Web application development. Students learn elements of HTML (Hypertext Markup Language) and its use in creating Web applications. Students will learn to add functionality to Web pages/sites using JavaScript and DHTML (Dynamic HTML). In addition, students will be taught the basics of XML (Extensible Markup Language) and software packages that automate the Web design and development process. Topics include Web page structures, tables, frames, forms and validation, multimedia Web pages, scripting languages, and cloud storage.
Prerequisite(s): ENG 096, and MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 130 – Visual Basic Programming
In this course, students will build computing applications using Visual Basic, an object-oriented, event-driven programming language. Topics include graphical user interface design and implementation, file input and output (I/O), forms, menu bars, buttons, dialog and list boxes, array of controls, methods (subroutines), debugging techniques, and error-handling routines.
Prerequisite(s): ENG 096, if required, and MAT 119
4 lecture hours per week
4 credit hours

CST 135 – Linux Fundamentals
This course provides an introduction to the Linux operating system and its applicability to digital forensics. Topics include Linux scripting, installation, configuration, boot loaders, mounting drives and images, process control, user and group administration, file system administration and management, as well as setting up a secure Linux login environment.
Prerequisite(s): ENG 097, and MAT 017 or MAT 019/MAT 021 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 135 – Linux Fundamentals
This course provides an introduction to the Linux operating system and its applicability to digital forensics. Topics include Linux scripting, installation, configuration, boot loaders, mounting drives and images, process control, user and group administration, file system administration and management, as well as setting up a secure Linux login environment.
Prerequisite(s): ENG 097, and MAT 017 or MAT 019/MAT 021 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 136 – Computer Algorithms
This course introduces students to the fundamentals of Object-Oriented Programming. Topics include design, development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This is the first of a two-course sequence designed to teach programming in Swift.
Prerequisite(s): ENG 096, and MAT 019/MAT 021 or MAT 022, if required
3 lecture hours per week
3 credit hours

▲ CST 140 – Introduction to iOS Development
This course introduces students to the fundamentals of iOS application development using the Swift programming language and the Apple toolset. Using iOS as the platform, students will explore Apple developer tools, such as Xcode, instruments, debugger, analyzer, and iOS simulator. Topics include app functionality, iOS API features, as well as building an original iOS app from conception to completion. Access to an Apple Mac computer is required.
3 lecture hours per week
3 credit hours

▲ CST 141 – App Development I
This course introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This is the first of a two-course sequence designed to teach programming in Swift.
Prerequisite(s): ENG 096, and MAT 021 or MAT 022, if required, and CST 140
3 lecture hours per week
3 credit hours

▲ CST 161 – Computer Programming Fundamentals
This course introduces students to the logic used to develop solutions to common problems in the computer science field using a contemporary high-level programming language such as Python. These step-by-step, detail solutions are called algorithms and serve as the basic solution to most computer science problems. Topics include number systems, computer instructions, program logic, secure coding techniques, file management, and foundational concepts in computer science. Problem solving, critical thinking, and programming techniques are emphasized throughout the course.
Prerequisite(s): ENG 096, and MAT 019/MAT 021 or MAT 022, if required
4 lecture hours per week
4 credit hours

▲ CST 162 – Computer Algorithms
This course introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This is the first of a two-course sequence designed to teach programming in Swift.
Prerequisite(s): ENG 096, and MAT 019/MAT 021 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 170 – Digital Forensics Essentials
This hands-on course introduces the fundamental principles of forensic science generally, and the technical and legal aspects of digital forensics specifically, including forensic procedures, imaging, hashing, file recovery, file system basics, mismatched file types, reporting, and the laws governing digital evidence. Students will use both open-source and court-approved (AccessData) forensic software tools to conduct digital forensic examinations.
Prerequisite(s): ENG 097, and MAT 019 or MAT 019/MAT 021 or MAT 022, if required
4 lecture hours per week
4 credit hours
COURSE DESCRIPTIONS

CST 175 – Networking Fundamentals
This course covers the basics of networking. Students are introduced to the many types of connections found within computer networks, the technologies necessary to connect computers and networks, and actions that occur when a data transmission produces an error. Topics include firewalls, network operating systems, hardware and software protocols, internetworking, telecommunications, and security.
Prerequisite(s): CST 101, or CST 120, or CST 161
3 lecture hours per week
3 credit hours

CST 176 – Advanced Digital Forensics
This hands-on course builds upon foundational knowledge gained in Digital Forensics Essentials and Linux Fundamentals courses. Students will perform detailed forensic analyses and produce forensic reports of findings on a series of compromised and/or seized system images, using tools for distributed data collection, imaging and forensics. Students will examine host-level data along with some network-level data and mobile device data, as well as systematically determine what happened and how. Students will use both open-source and court-approved (AccessData) forensic software tools to conduct digital forensic examinations.
Prerequisite(s): CST 135 and CST 170
4 lecture hours per week
4 credit hours

CST 202 – Systems Analysis and Design
This course is a general study of concepts related to systems analysis and design and the role of the systems analyst. Topics include the secure systems development life cycle, feasibility study, data flow diagrams, data dictionaries, reports, UML diagrams, and other documenting system specifications.
Prerequisite(s): CST 101, or CST 130, or CST 161
3 lecture hours per week
3 credit hours

CST 204 – Database Management Systems
This course concentrates on the principles, design, implementation, maintenance, and applications of database management systems. Topics include security, privacy, normalization, data modeling, data validation, user forms, reports, and Web connectivity. The structured query language, SQL, will be used to process an industry-standard relational database management system.
Prerequisite(s): CST 101, or CST 130, or CST 161
3 lecture hours per week
3 credit hours

CST 210 – Principles of Cybersecurity
This course introduces the student to the field of cybersecurity. It presents a comprehensive survey of the breadth of cybersecurity. This includes local host, network, web, and databases that are prone to attack. The student will focus on the identification of security threats and countermeasures that can be taken to make these systems more secure. Students will also learn about the legal, compliance, ethical and professional issues in cybersecurity.
Prerequisite(s): ENG 097, or MAT 019 or MAT 022, if required
3 lecture hours per week
3 credit hours

CST 212 – Programming for Mobile Devices
This course provides a strong foundation necessary to build mobile applications for Android devices. This course builds upon key programming concepts including variables, conditionals, loops, and arrays, and gives the confidence and technical skills needed to create fully-functional Android apps.
Prerequisite(s): CST 115, or CST 130, or CST 161
3 lecture hours per week
3 credit hours

CST 215 – Cyber Law and Ethics
This course presents the student with issues of law and ethics in cyberspace. Topics covered will include government regulation of online behavior, constitutional considerations concerning free speech and content controls, intellectual property, hacking, and the ethics of internet behavior. This course will explore the laws governing security breaches and responses to such breaches, and current United States case law and statutes governing the Internet.
Prerequisite(s): ENG 101
3 lecture hours per week
3 credit hours

CST 220 – Computer Organization, Architecture, and Assembly Language
This course is an introduction to the organization and architecture of a computer system. The course will focus on machine representation of instructions and data through the study of the digital/logic level, machine level, assembly level, and operating system level. Assembly language programming is used as a means to introduce computer architecture. Topics include processors, instruction sets, addressing techniques, subroutines, digital logic, number systems, memory dumps, registers, and the internal data representation.
Prerequisite(s): CST 161
4 lecture hours per week
4 credit hours

CST 222 – Network Forensics and Incident Response
This course presents the student with issues of data breaches, incidents, and intrusions. Topics include the Internet of Things (IoT), network traffic tools, data packet flow, and event log analyses. Students will learn to identify, categorize, and respond to network and host incidents in a forensically secure manner.
Prerequisite(s): CST 176
4 lecture hours per week
4 credit hours

CST 226 – Cloud and Personal Device Forensics
This course presents the various and emerging forensic tools used to recover evidence from Cloud storage and from personal devices, such as mobile phones, smart-watches, and voice-enabled devices. Students will learn how to analyze and interpret recovered data, as well as discover which tools are best suited for recovering valuable electronic evidence from smart devices. The forensics challenges and issues of Cloud computing and the Internet of Things (IoT) will also be studied.
Prerequisite(s): CST 176
4 lecture hours per week
4 credit hours

CST 230 – Windows Administration and Security
This hands-on course provides a comprehensive understanding of the popular Windows operating system and associated security concepts. Topics include Windows system administration tasks, TCP/IP networking suite, access control methods, baseline security configurations, virtualized environments, detection and removal of malware, and native digital forensics tools.
Prerequisite(s): CST 135
3 lecture hours per week
3 credit hours

CST 240 – Network Forensics and Incident Response
This course covers the prerequisite knowledge and hands-on practice with network forensics in response to data breaches, incidents, and intrusions. Topics include the Internet of Things (IoT), network traffic tools, data packet flow, and event log analyses.
Prerequisite(s): CST 176
4 lecture hours per week
4 credit hours
CST 261 – Data Structures
This course investigates abstract data types (ADTs), recursion, algorithms for searching and sorting, and basic algorithmic analysis using an object-oriented language. Data structures to be covered include, but not limited to strings, arrays, lists, stacks, queues, trees, and heaps. Students also will explore the use of a variety of data structures and useful algorithms, such as searching and sorting, in the context of modeling and simulation.
Prerequisite(s): CST 162
4 lecture hours per week
4 credit hours

CST 285 – Cyber Forensics Capstone
This capstone course is required of all cyber forensics degree and certificate candidates. As a culminating course, it allows students to demonstrate their interdisciplinary knowledge and technical skills learned in previous program courses. Through a service-learning field experience, students develop the ability to meet and excel in career and social demands of the 21st century by applying program content in a practical setting and interacting with professionals in a variety of fields. This course combines on-campus meetings, service placement with community partners, and independent projects. This capstone experience must be taken in a student’s last semester immediately prior to graduation.
Prerequisite(s): Completion of all third semester courses.
1 lecture hour per week/90 contact hours
3 credit hours

CST 298 – Special Topics in Computer Science
Topics of current interest and trends in computer programming are discussed in this seminar course. Course content is arranged to satisfy particular needs and interests of students. This course is intended for students who are completing their degree in Computer Science.
Prerequisite(s): Division approval required
3 credit hours

DMSM 100 – Introduction to Clinical Sonography
This course provides a historical, professional and occupational development of Diagnostic Medical Ultrasound. Case studies of the various Imaging Modalities and how to correlate these findings with ultrasound will be emphasized. The terminology used in Sonography and scanning demonstration labs are included.
Prerequisite(s): BIO 105, PHY 125 with lab or PHY 101 with lab, MAT 119, and ENG 101
2 lecture hours per week
2 credit hours

DMSM 101 – Patient Care
The course includes a survey of general principles, techniques and procedures in patient care, ethics and medicolegal. The course introduces the student to practical components for the clinical setting. Demonstration lab and competency testing in Patient Care skills are included.
2 lecture hours per week
2 credit hours

DMSM 102 – Cross-sectional Anatomy
This course provides basic sectional anatomy of the abdomen and pelvis, which allows the ultrasound student to develop sufficient comfort with cross-sectional images.
2 lecture hours per week
2 credit hours

DMSM 103 – Ultrasound Physics and Instrumentation – Part I
This course provides the student with the knowledge of ultrasound physics and instrumentation with an emphasis on sound and its interaction with matter. Topics covered in this course include basic physical principles of ultrasound, Doppler principles and ultrasound equipment controls.
Prerequisite(s): PHY 125 with lab, or PHY 101 with lab
3 lecture hours per week
3 credit hours

DMSM 104 – Ultrasound Physics and Instrumentation – Part II
This course provides the ultrasound student with the knowledge of ultrasound physics and instrumentation with an emphasis on instrumentation. Topics include detailed ultrasound instrumentation, applied Doppler Effect with interpretation, imaging recording devices and quality control.
Prerequisite(s): DMSM 103
3 lecture hours per week
3 credit hours

DMSM 105 – Ultrasound of the Abdomen – Part I
This course provides the foundation for human physiology and pathophysiology, relating these sciences to clinical diseases of the abdomen and the resultant pathological effects of the anatomy. Scanning demonstration labs are included.
2 lecture hours per week
3 credit hours

DMSM 106 – Ultrasound of the Abdomen – Part II
This course further provides the foundation for human physiology and pathophysiology, relating these sciences to clinical diseases of the abdomen and the resultant pathological effects on the anatomy. Demonstration labs are included.
Prerequisite(s): DMSM 105
2 lecture hours per week
3 credit hours

DMSM 107 – Ultrasound of the Female Pelvis
This course provides the ultrasound student with a basic knowledge of gynecology and its ultrasonographic applications. Normal and abnormal pathophysiology of the female pelvis is included.
3 lecture hours per week
3 credit hours

DMSM 109 – Obstetrical Sonography – Part I
This course provides the ultrasound student with information necessary to perform sophisticated obstetrical procedures utilizing ultrasound. Examination strategies for various procedures are explored as well as the integration of ultrasound into established clinical practices.
3 lecture hours per week
3 credit hours

DMSM 111 – Ultrasound of Superficial Structures I
This course provides the didactic and clinical knowledge necessary to perform basic sonographic examination of anatomy classified as superficial structures. Utilizing specialized equipment and high megahertz transducers, examination strategies for various procedures are discussed. The role of ultrasound in established clinical practices utilizing superficial structures imaging is discussed. Demonstration labs are included.
3 lecture hours per week
3 credit hours

DMSM 116 – Ultrasound Registry Review
This course is comprehensive, covering all topics that appear on the current ARDMS test content outline for General Abdomen Obstetrics and Gynecology and Physics and Instrumentation.
3 lecture hours per week
3 credit hours

DMSM 117 – Obstetrical Sonography – Part II
This course provides the ultrasound student with information necessary to perform sophisticated obstetrical procedures utilizing ultrasound. Examination strategies for various procedures are explored as well as the integration of ultrasound into established clinical practices.
3 lecture hours per week
3 credit hours

DMSM 118 – Ultrasound of the Female Pelvis
This course provides a historical, professional and occupational development of Diagnostic Medical Ultrasound. Case studies of the various Imaging Modalities and how to correlate these findings with ultrasound will be emphasized. The terminology used in Sonography and scanning demonstration labs are included.
Prerequisite(s): BIO 105, PHY 125 with lab or PHY 101 with lab, MAT 119, and ENG 101
2 lecture hours per week
2 credit hours

DMSM • Diagnostic Medical Sonography, Muhlenberg

DMSM 100 – Introduction to Clinical Sonography
This course provides a historical, professional and occupational development of Diagnostic Medical Ultrasound. Case studies of the various Imaging Modalities and how to correlate these findings with ultrasound will be emphasized. The terminology used in Sonography and scanning demonstration labs are included.
Prerequisite(s): BIO 105, PHY 125 with lab or PHY 101 with lab, MAT 119, and ENG 101
2 lecture hours per week
2 credit hours

DMSM 101 – Patient Care
The course includes a survey of general principles, techniques and procedures in patient care, ethics and medicolegal. The course introduces the student to practical components for the clinical setting. Demonstration lab and competency testing in Patient Care skills are included.
2 lecture hours per week
2 credit hours

DMSM 102 – Cross-sectional Anatomy
This course provides basic sectional anatomy of the abdomen and pelvis, which allows the ultrasound student to develop sufficient comfort with cross-sectional images.
2 lecture hours per week
2 credit hours

DMSM 103 – Ultrasound Physics and Instrumentation – Part I
This course provides the student with the knowledge of ultrasound physics and instrumentation with an emphasis on sound and its interaction with matter. Topics covered in this course include basic physical principles of ultrasound, Doppler principles and ultrasound equipment controls.
Prerequisite(s): PHY 125 with lab, or PHY 101 with lab
3 lecture hours per week
3 credit hours

DMSM 104 – Ultrasound Physics and Instrumentation – Part II
This course provides the ultrasound student with the knowledge of ultrasound physics and instrumentation with an emphasis on instrumentation. Topics include detailed ultrasound instrumentation, applied Doppler Effect with interpretation, imaging recording devices and quality control.
Prerequisite(s): DMSM 103
3 lecture hours per week
3 credit hours

DMSM 105 – Ultrasound of the Abdomen – Part I
This course provides the foundation for human physiology and pathophysiology, relating these sciences to clinical diseases of the abdomen and the resultant pathological effects of the anatomy. Scanning demonstration labs are included.
2 lecture hours per week
3 credit hours

DMSM 106 – Ultrasound of the Abdomen – Part II
This course further provides the foundation for human physiology and pathophysiology, relating these sciences to clinical diseases of the abdomen and the resultant pathological effects on the anatomy. Demonstration labs are included.
Prerequisite(s): DMSM 105
2 lecture hours per week
3 credit hours

DMSM 107 – Ultrasound of the Female Pelvis
This course provides the ultrasound student with a basic knowledge of gynecology and its ultrasonographic applications. Normal and abnormal pathophysiology of the female pelvis is included.
3 lecture hours per week
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This course provides the ultrasound student with information necessary to perform sophisticated obstetrical procedures utilizing ultrasound. Examination strategies for various procedures are explored as well as the integration of ultrasound into established clinical practices.
3 lecture hours per week
3 credit hours

DMSM 111 – Ultrasound of Superficial Structures I
This course provides the didactic and clinical knowledge necessary to perform basic sonographic examination of anatomy classified as superficial structures. Utilizing specialized equipment and high megahertz transducers, examination strategies for various procedures are discussed. The role of ultrasound in established clinical practices utilizing superficial structures imaging is discussed. Demonstration labs are included.
3 lecture hours per week
3 credit hours

DMSM 116 – Ultrasound Registry Review
This course is comprehensive, covering all topics that appear on the current ARDMS test content outline for General Abdomen Obstetrics and Gynecology and Physics and Instrumentation.
3 lecture hours per week
3 credit hours

DMSM 117 – Obstetrical Sonography – Part II
This course provides the ultrasound student with information necessary to perform sophisticated obstetrical procedures utilizing ultrasound. Examination strategies for various procedures are explored as well as the integration of ultrasound into established clinical practices.
3 lecture hours per week
3 credit hours

= Fulfills a General Education Requirement

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DMSM 118 – Ultrasound of Superficial Structures II
This course provides the didactic and clinical knowledge necessary to perform basic sonographic examination of anatomy classified as superficial structures. Utilizing specialized equipment and high megahertz transducers, examination strategies for various procedures are discussed. The role of ultrasound in established clinical practices utilizing superficial structures imaging is discussed.
Prerequisite(s): DMSM 111
3 lecture hours per week
3 credit hours

ECO 105 – Basic Economics
This is a one-semester survey course on overall macro- and micro-economic issues. On the micro side, topics will include the operations of a market economy using the fundamental principles of supply and demand, production costs and basic market models of competition, monopolistic competition, oligopoly and monopoly. On the macro side, topics will include the determination of national income, money and the financial system, the interaction of monetary and fiscal policies to accomplish economic objectives. Students will be able to understand the overall functioning of the economy.
Prerequisite(s): ENG 087, if required
3 lecture hours per week
3 credit hours

ECO 101 – Principles of Economics I
This is a principles of macroeconomics course, covering the determination of national income and output, the economic problems of GDP growth, unemployment, price instability, and national deficits & debt. Other topics include aggregate demand and aggregate supply, other aggregate sectors of the economy, money, banking, the financial system, fiscal and monetary policies. Students will be able to evaluate and measure the macroeconomic health of the nation in relation to unemployment, inflation, and other macroeconomic indicators and in the context of a global economy.
Prerequisite(s): ENG 097, if required, and MAT 022
3 lecture hours per week
3 credit hours

ECO 202 – Principles of Economics II
This is a principles of microeconomics course which will provide students with an introduction to the theory of the firm and consumer behavior, rooted in the fundamental principles of demand and supply. Other topics will include cost analysis and profit maximization under various market models, the pricing of resources and related contemporary issues concerning resources like labor, capital, land (natural resources) and entrepreneurship. Students will be able to analyze the behavior of a firm as well as price determination.
Prerequisite(s): ENG 097, if required, and MAT 022
3 lecture hours per week
3 credit hours

ECO 207 – Urban Economics
This course provides students with an introduction to the principles of urban and regional economics with applications to current metropolitan problems. Emphasis is on the determination of a viable economic base that allows maximum employment, the provision of adequate public services, the impact of federal and state policies on urban transportation and income distribution, fiscal conditions, and the supply of housing.
Prerequisite(s): ECO 201 or ECO 202
3 lecture hours per week
3 credit hours

ECO 205 – Money and Banking
The main objective of this course is to develop the framework for examining and understanding the evolution and functions of money and the financial system. Other topics will include analysis of credit and theory and practice of bank operations, the Federal Reserve System, foreign exchange, and recent banking developments.
Prerequisite(s): ECO 201 or ECO 202
3 lecture hours per week
3 credit hours

ECO 209 – The International Economy
This course introduces students to international trade theory and policy. Topics will include the principles and importance of trade, the basis of and gains from trade, balance of payments, trade restrictions (barriers) and commercial policy, foreign exchange markets, multinational and capital flows, trade liberalization via multilateral trade agreements (Examples: NAFTA, the EU, the Euro, and WTO). Students will obtain the analytical skills and vocabulary needed in international trade, commercial, and financial institutions.
Prerequisite(s): ECO 201
3 lecture hours per week
3 credit hours

EDU 205 – Educational Psychology
This course involves the application of psychology to the processes of teaching and learning. The course helps students apply understanding and methods of psychology to problems in teaching/learning situations.
Prerequisite(s): ENG 101 or ENG 112
3 lecture hours per week
3 credit hours

EDU 215 – Field Work in Education
This course provides the opportunity for students to acquire an understanding of effective teaching skills. Students are required to attend regular classes on campus and to observe a minimum of fifty hours of class-room instruction in an approved educational institution. Students must complete an application form with the Dean’s office prior to course registration.
Prerequisite(s): EDU 205, or permission of Division Dean’s office
3 lecture hours per week
3 credit hours

EET 101 – Principles of DC Circuits
This course provides an analysis of passive DC networks using standard network theorems such as superposition, mesh and nodal analysis, Thévenin, current and voltage source conversions. Laboratory emphasizes the use and understanding of basic instrumentation and measurement techniques.
Prerequisite(s): ENG 096, if required
Co-requisite(s): EETL 102, and MAT 143 or MAT 119
3 lecture and 3 laboratory hours per week
4 credit hours

EET 102 – Principles of AC Circuits
This course is a continuation of EET 101, including analysis of passive devices in AC networks, resonance and characteristics of transformers. Laboratory introduces measurement techniques utilizing signal generators, oscilloscopes and frequency counters.
Prerequisite(s): EET 101
Co-requisite(s): EETL 102
2 lecture and 3 laboratory hours per week
3 credit hours
EET 111 – Digital Computer Fundamentals
This course is a study of the fundamentals of digital computers including number systems, Boolean algebra, Karnaugh maps, logic functions, logic gates, and the implementation of logic functions using discrete and integrated circuit components. Combinations of fundamental circuits are developed to form counters, registers, encoders, decoders, multiplexers, demultiplexers, arithmetic, and memory units. In the laboratory the student is introduced to breadboarding, analysis, synthesis, testing and troubleshooting of digital circuits. This course fulfills a General Education Requirement.

Co-requisite(s): ENG 096, if required
Prerequisite(s): Division approval required
3 lecture hours and 4 hours of professional work per week
4 credit hours

EET 112 – (UAS 112) Sensors for Drones
This course will focus on the key different types of sensors: light, sound, heat, chemical, speed/distance, magnetic-field and image. Students will identify the minimum required number and types of sensors needed for drones to fly successfully, move onto troubleshooting, calibration, programming, and deployment and real-time data feedback.

Prerequisite(s): EET 111, and MAT 143 or MAT 119
3 lecture and 3 laboratory hours per week
3 credit hours

EET 204 – Electromechanical Devices and Systems/Robotics
This course provides an analysis, synthesis, and integration of systems encompassing electromechanical, electronic, electrical, and mechanical subsystems. Actuators, motors, generators, sensors, transducers, tachometers, amplifiers, signal conditioners, and displays are studied. Analog, digital, and hybrid (analog/digital) control systems, instrumentation and measurement techniques are also studied. Further study of the integration of automatic control systems and computers involve programmable controllers, robotics, and automated manufacturing systems. In the laboratory the student performs experiments on these systems and subsystems with emphasis on diagnostic testing, interfacing, measurement, troubleshooting, calibration, programming, and servicing techniques.

Prerequisite(s): EET 213
Co-requisite(s): EETL 204 and EET 211
3 lecture and 3 laboratory hours per week
4 credit hours

EET 209 – (UAS 209) Drone Control Systems
This course focuses on the analysis and fundamentals of control systems used for Drone Design and Applications. Students will utilize the PX4 System Architecture and other core concepts to learn how to configure system inputs for optimal performance and artificial intelligence applications.

3 lecture hours per week
3 credit hours

EET 211 – Computer Systems/Microprocessors
This course is a continuation of EET 111. It is the study of digital computer sub-assemblies such as the central processing unit (CPU), data registers, data bus configurations, address registers, and various peripherals. Hardware, software, and firmware aspects of computer systems are studied with emphasis on microprocessor architecture and machine language programming. In the laboratory the student is required to build and troubleshoot complex control circuits and to program and interface a microprocessor with various input/output (I/O) devices and peripherals.

Prerequisite(s): EET 111
Co-requisite(s): EETL 211
3 lecture and 3 laboratory hours per week
4 credit hours

EET 212 – (UAS 212) IoT Applications for Drones
This course will focus on drones and how they are utilized in Internet of Things (IoT) environments. The students will learn about machine to machine ecosystems, authentication, security mobile networks and RF communications.

3 lecture hours per week
3 credit hours

EET 213 – Semiconductor Devices and Circuits
This is a study of solid state devices such as diodes, bipolar junction transistors, field effect transistors, unijunction transistors, silicon controlled rectifiers, and other four-layer devices and their application in basic circuits. Multistage amplifiers, differential amplifiers, operational amplifiers, rectifiers, regulators, and control circuits are also studied. In the laboratory the student is required to analyze, synthesize, test, troubleshoot and evaluate circuits and devices, and become proficient in the use of test equipment and development of measurement techniques.

Prerequisite(s): EET 102
Co-requisite(s): EETL 213
4 lecture and 3 laboratory hours per week
5 credit hours

EET 265 – Fiber Optic Communication Systems
This course is a study of the principles and techniques associated with the transmission of digital and analog signals through optical waveguides (fibers). Topics will include: properties of optical fibers and waveguides, components and basic circuits of optical communication systems, baseband and pulse modulation, quantization, digital signaling techniques, multiplexing and coherent optical communications. The laboratory component will provide hands-on experience in the handling of fibers, splicing and connecting, measurement of fiber properties, the building and testing of a fiber optic communication system.

Prerequisite(s): EET 111
3 lecture and 3 laboratory hours per week
4 credit hours

EET 270 – Photovoltaic (PV) Systems
This course covers the basics of Photovoltaic (PV) technology and systems. The curriculum includes the study of sun and earth geometries and relationships, solar energy, PV terminology, equipment and processes, site assessment, system design, the electrical principles of solar systems, the operation and installation of critical components, troubleshooting, and PV economics. The hands-on laboratory component will introduce the student to safety, PV tools, PV measurements and wiring required in building a photovoltaic array. The course is designed to prepare the student to take an industry-based entry-level PV Systems exam.

Prerequisite(s): EET 101
Co-requisite(s): EETL 270
3 lecture and 3 laboratory hours per week
4 credit hours

EET 285 – (UAS 285) Drone Design Capstone
In this course the student will design and create a drone from concept to completion in a team environment. Students will be expected to document their work through all stages of development and to apply project management techniques with their group. This capstone can be used for students to demonstrate their Drone Design and Applications acumen to potential employers.

Prerequisite(s): EET 209
3 lecture hours per week
3 credit hours

EET 290 – Co-op Education Experience in Electronics/Electromechanical Technology
This is a work-externship comprising a minimum of 200 hours of employment related to surveying or civil/construction engineering technology with a municipal engineering organization, a building contractor, surveyor, architect, or a private engineering firm.

Prerequisite(s): Division approval required
200 contact hours
3 credit hours
UAS 105 Remote Pilot Operations
This course offers in-depth preparation for students to take the FAA Remote Pilot Aeronautical Knowledge test. Topics will include regulations, airspace and requirements, weather, loading, and performance, and small unmanned aircraft operations. Students acquire actual experience of operating in the National Airspace System (NAS) through a series of unmanned flights at the Droneport. FAA Remote Pilot Certificate must be completed during this course at student expense.
2 lecture hours and 2 laboratory hours per week
3 credit hours
This course requires travel to Warren County Community College and is only available to students enrolled in Drone Applications and Technology, A.A.S. or Remote Pilot and Drone Application, CT.

EETL 101 – Principles of DC Circuits Laboratory
This is a co-requisite laboratory course for EET 101.
Co-requisite(s): EET 101

EETL 102 – Principles of AC Circuits Laboratory
This is a co-requisite laboratory course for EET 102.
Co-requisite(s): EET 102

EETL 105 – Introduction to Engineering Fundamentals Laboratory
This course is an introduction to engineering methods through the study of numerous problems. Orderly analyses and accurate computation are stressed. In addition, the course provides the student with a preliminary insight into the field of engineering and its aspects. Activities include algebraic manipulation of equations, trigonometry, vectors, sinusoids, matrices, differentiation and integration. Engineering applications are reinforced through extensive problem-solving by using math in context. MATLAB, an engineering analysis software, will be introduced and supported in lab applications. Laboratory emphasizes the use and understanding of basic instrumentation and measurement techniques and applications used.
Co-requisite(s): MAT 144, or MAT 155, or MAT 171
3 lecture and 3 laboratory hours per week
4 credit hours

EETL 270 – Photovoltaic (PV) Systems Laboratory
This is a co-requisite laboratory course for EET 270.
Co-requisite(s): EET 270

EGG 111 – Engineering & Computer Graphics
This course is a fundamental study of the engineering drawing using computer-aided engineering software (Autodesk Inventor) to construct solid and parametric modeling drawings. Topics covered include 3-D solid modeling, 2-D multi-view drawings, parametric dimensioning, section views, auxiliary views, and assembly modeling. CAD projects include 3-D solid model drawings and 2-D orthographic drawings, which address topics such as geometric constraints, feature interactions, parametric dimensions, and associative functionality.
1 lecture hour and 3 laboratory hours per week
2 credit hours

EGG 101 – Introduction to Engineering: Mathematics and Applications
This course is an application-based introduction to engineering and advanced mathematics topics through experiential, hands-on engineering labs, providing the student with a preliminary insight into the field of engineering and its aspects. Activities include algebraic manipulation of equations, trigonometry, vectors, sinusoids, matrices, differentiation and integration. Engineering applications are reinforced through extensive problem-solving by using math in context. MATLAB, an engineering analysis software, will be introduced and supported in lab applications. Laboratory emphasizes the use and understanding of basic instrumentation and measurement techniques and applications used.
Co-requisite(s): MAT 144, or MAT 155, or MAT 171
3 lecture and 3 laboratory hours per week
4 credit hours

EGG 107 – Understanding Sustainability & Green Technologies
This course offers a study of the fundamentals of Sustainability and Green Technologies. Topics covered will include the history of environmentalism to the present; the interaction between humans and the environment, Triple Bottom Line, namely, economic prosperity, environmental quality and social equity, and how these aspects relate; green jobs in the present and future economy; environmental laws and regulations, from the local arena to the federal and global arenas. The economics of sustainability will be addressed. Focus is directed towards fundamental concepts rather than in-depth technical and scientific analysis in order to provide an overview of a broad subject.
Prerequisite(s): ENG 097 and MAT 022, if required, or approval of Division.
3 lecture hours per week
3 credit hours

EGG 201 – Engineering Mechanics (Statics)
This course is a study of basic structural and mechanical systems in static equilibrium. Free-body diagrams, vector algebra, and scalar analysis are used to find resultant forces and moments, and for solving equilibrium problems; applications including simple structures and machines, dry friction, center of gravity, centroids, area and mass moments of inertia by integration.
Prerequisite(s): MAT 171 and PHY 111
3 lecture hours per week
3 credit hours

EGG 202 – Engineering Mechanics (Dynamics)
This course is the study of the kinematics and kinetics of motion, including rectilinear and curvilinear motion, force and acceleration, work and energy, impulse and momentum, for particles and rigid bodies. Calculus is used throughout for problem solving.
Prerequisite(s): MAT 172 and EGG 201
3 lecture hours per week
3 credit hours

EGG 203 – Applications of Computers in Science and Engineering
This course emphasizes hands-on experience with stand-alone microcomputers. Simulations, data analysis, graphics techniques, and structured programming are used to show the range of computer problem-solving techniques. Other topics covered are program correctness, operating systems, a survey of computer languages, the relationship of the components internal and external to the computer.
2 lecture and 3 laboratory hours per week
3 credit hours
EGG 205 – Surveying
This course provides the theory and practice of measurements and their application. Topics include use of instruments, recording of data, computations and mapping; theory and use of simple curves; earthwork measurements and computation.
2 lecture and 3 field laboratory hours per week
3 credit hours

EGG 207 – Principles of Electrical Engineering
This course is an introduction to the fundamental concepts of electric circuits. The course covers mesh and nodal analysis, network theorems and applications, steady state analysis, and phasor diagrams. The introduction includes time-varying analysis R-L, R-C, and R-L-C circuits. Prerequisite(s): PHY 201
Co-requisite(s): EGG 213 and MAT 272
3 lecture hours and 2 laboratory hours per week
3 credit hours

EGG 213 – 3-D AutoCAD
Through the user coordinate system (UCS) and viewports the student will learn to create 3-D wire frame drawings clad with 3D faces and meshes in order to create realistic images via hidden line removal and perspective view. 3-D solid geometry techniques will be emphasized to increase drawing efficiency. Shade and Animator will be illustrated.
Prerequisite(s): MET 109 or approval of the Division
Co-requisite(s): EGG 213
2 lecture hours and 2 laboratory hours per week
3 credit hours

EGG 251 – Digital Design
This course is a study of the fundamentals of digital computers including number state machines systems, Boolean algebra, Karnaugh maps, logic functions, logic gates, and the implementation of logic functions using discrete and integrated circuit components. Combinations of fundamental circuits are developed to form counters, registers, encoders, decoders, multiplexers, demultiplexers, arithmetic, and memory units.
3 lecture hours per week
3 credit hours

EGGL • Engineering Lab

EGGL 101 - Introduction to Engineering: Mathematics and Applications Laboratory
This is a co-requisite laboratory course for EGG 101.
Co-requisite(s): EGG 101

EGGL 207 – Principles of Electrical Engineering Laboratory
This is a co-requisite laboratory course for EGG 207.
Co-requisite(s): EGG 207

EGGL 213 – 3-D AutoCAD Laboratory
This is a co-requisite laboratory course for EGG 213.
Co-requisite(s): EGG 213.

EIP • Educational Interpreting

EIP 201 – Methods of Instruction for Educational Interpreters – Online
This course is designed to provide educational interpreting students with a basic knowledge curriculum development, based upon student motivation and learning theories will be addressed as they relate to primary and secondary age students. Students will review the New Jersey Core Curriculum Content Standards, (CCCS), as well as unique curricula designed for students who are deaf/hard of hearing in the content areas. Instructional strategies for educational interpreters with an emphasis on vocabulary acquisition and language comprehension for students will be addressed. Collaborative strategies for educational interpreters working with regular education and special education teachers and related services personnel in a variety of educational settings are discussed as well as assessment of academic materials and successful completion of learning objectives according to established criteria in the students’ individualized education programs (IEP) will be presented.
3 lecture hours per week
3 credit hours

EIP 202 – Language Development for the Educational Interpreter – Online
This course is designed to provide educational interpreting students with an understanding of the principles and theories of childhood language development and will compare the development of language for children with various degrees of hearing loss with language development of children without educational disabilities. Students will survey language intervention models for students who are deaf and hard of hearing. Additional issues impacting language development in children with hearing loss, including, but not limited to, alternative forms of communication, bilingual/bicultural issues, assistive technology, and cochlear implants.
3 lecture hours per week
3 credit hours

EIP 203 – Child Development for Educational Interpreters – Online
This course is designed to provide educational Sign Language/English interpreting students with an overview and an understanding of the development of children from conception to adolescence, the interaction of physical, cognitive, emotional, linguistic, social and cultural factors within developmental stages and in addition, the students will have an understanding of the deaf and hard of hearing child from a developmental perspective. Students will compare the development of children without specialized needs with the development and issues facing children and families with specialized needs.
3 lecture hours per week
3 credit hours

EIP 204 – Ethics and Laws for Educational Interpreters – Online
This course is designed to provide students with an overview and understanding of the unique role and responsibilities of educational interpreters and the various interpreter assignments within multiple educational settings; Collaboration and consultation models as the framework for the educational interpreters role with regular education teachers, special education teachers, school administration and parents; The role of educational interpreters as a member of the individualized education program (IEP) team; Issues related to etiquette, confidentiality, supervision and evaluation; and finally, federal and state mandates which outline the provisions of educational interpreting as a related service.
3 lecture hours per week
3 credit hours
### EMT 100 – Cardiopulmonary Resuscitation

This course meets the requirements of the American Heart Association’s Basic Life Support for Healthcare Providers and the American Red Cross’ CPR for the Professional Rescuer. This course is designed to teach techniques for basic airway assessment and management, cardiopulmonary resuscitation, and management of foreign-body airway obstruction for adults, children, and infants. The student will also be introduced to the automated external defibrillator (AED), and will become proficient in its use. An American Heart Association or American Red Cross certified instructor will teach this course. A course completion card will be issued by the appropriate certifying agency.  

15 lecture hours  
1 credit hour

### EIP 210 – Deaf-Blind Interpreting and Interpreting Strategies

This course will discuss the various roles and responsibilities of interpreters, including ethical and cross-cultural considerations. Interpreters will work with persons who are Deaf-Blind. Interpreting strategies focus on linguistic modifications for tactile and restricted-field interpreting, as well as incorporating environmental aspects into the interpreting process. Students will apply strategies related to specific linguistic modifications such as condensing and editing, utilizing pre-and post-assignment information, and transferring non-manual grammatical signals into a tactile mode. The course also discusses resources, agencies, and effective provision of interpreter/support service provider services for academic or community events where Deaf-Blind persons participate.  

3 lecture hours per week  
3 credit hours

### EMT 106 – Emergency Medical Technician

This course meets the requirements of the National Highway and Transportation Safety Administration’s Emergency Medical Technician National Educational Standards. The course is designed to instruct a student to the level of Emergency Medical Technician. The EMT serves as a vital link in the chain of the healthcare team. The student will learn all skills necessary to provide emergency medical care at a basic life support (BLS) level with an ambulance or other specialized service. Upon successful completion of this course, the student will be eligible to take the state designated certification exam, which is required to obtain an EMT provider card issued by the NJ Department of Health and Senior Services - OEMS.  

Prerequisite(s): EMT 100, or proof of Professional level CPR  
3 lecture hours, 6 laboratory hours, and 3 field experience hours per week  
7 credit hours

### ENG • English

### ENG 081 – Accelerated Introduction to College Reading and Writing I

This course is an accelerated version of the last course in a multi-level sequence designed to help the under-prepared student to improve reading skills and successfully complete freshman composition. Students in English 081 must take the designated paired ENG 101 course.  

Prerequisite(s): Successful completion of ENG 087 or placement into ENG 091  
6 lecture hours per week  
6 institutional credit hours

### ENG 087 – Introduction to Language Arts

This course is an introduction to Language Arts and is a preparatory Basic Studies Program course designed to create a context for developmental reading and writing. The primary objectives of the course are to develop in the students the ability to manage time, to assimilate diverse educational materials centered on a theme, and to assist in the expression of their ideas, both written and oral.  

6 lecture hours per week  
6 institutional credit hours

### ENG 091 – Accelerated Introduction to College Reading and Writing II

This course is an accelerated version of the last course in a multi-level sequence designed to help the under-prepared student to improve writing skills and successfully complete freshman composition. Students in English 091 must take the designated paired ENG 101 course.  

Prerequisite(s): Satisfactory Placement Test scores on the Reading, Essay, and Sentence Sense tests. Placement into ENG 101 course  
2 lecture hours per week  
2 institutional credit hours

### ENG 096 – Introduction to College Reading and Writing I

This course is a middle-level course designed to help students whose reading ability indicates the need for concentrated involvement in the reading process, particularly to improve comprehension, critical reading, and vocabulary. This course is also designed to help students whose writing indicates the need for concentrated attention to and practice in the process of language use. Particular attention is given to producing quality compositions.  

Prerequisite(s): Successful completion of ENG 087 or Placement into ENG 096  
6 lecture hours per week  
6 institutional credit hours
ENG 101 – English Composition I
This course is the first half of a two-semester sequence completed by either ENG 102 or ENG 122 as required by program of study, which focuses on the development of the student's skill in writing expository prose.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

ENG 102 – English Composition II
This course is the second half of a two-semester sequence, which focuses on the continued development of the student’s skill in writing expository prose as well as an introduction to literature.
Prerequisite(s): ENG 101 or ENG 112
3 lecture hours per week
3 credit hours

ENG 112 – English Composition for Speakers of Other Languages
This course is the first half of a two-semester sequence, completed by either ENG 102 or ENG 122 as required by program of study, which focuses on the development of non-native speakers of English students’ skill in writing expository prose. ENG 112 serves as a substitute for ENG 101 for non-native speakers of English.
Prerequisite(s): ESL 067 and ESL 068, or ESL 097 and ESL 098, or ESI Placement Test
3 lecture hours per week
3 credit hours

ENG 122 – Introductory Technical and Business Writing
This course is the second half of a two-semester sequence, with focus on the types of writing used in business and industry, including process analysis, mechanism descriptions, summaries, proposals, research projects, letters, memorandums and resumes.
Prerequisite(s): ENG 101
3 lecture hours per week
3 credit hours
NOTE: THIS COURSE FULFILLS A GENERAL EDUCATION REQUIREMENT FOR A.A.S. DEGREE CANDIDATES ONLY

ENG 129 – Public Speaking
This course provides instruction and practice in oral communication. The course includes training in impromptu and extemporaneous speaking, logical organization of material, methods of proof, persuasion, audience analysis, techniques of delivery, and fundamentals of group discussion and debate.
3 lecture hours per week
3 credit hours

ENG 201 – Literature of the Western World I
This course includes a survey of the major periods in the development of Western literature from ancient Greece and Rome through the Medieval era, with an emphasis on the major figures such as Homer, Sophocles, Plato, Virgil, Paul, Augustine, Dante, and Chaucer. The place of literature in the social and political history of the West will also be explored.
Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

ENG 202 – Literature of the Western World II
This course includes a survey of the major periods in the development of Western literature from the Renaissance to the postmodern emphasis on the major figures such as Machiavelli, Shakespeare, Voltaire, Goethe, Tolstoy, Kafka, Eliot, and Borges. The place of literature in the social and political history of the West will also be explored.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 205 – British Literature I
This course includes a study of the major British poets and prose writers from Beowulf to Pope and Swift, studied in their historical context and in their aspects of enduring merit.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 206 – British Literature II
This course includes a study of the major British poets and prose writers from the pre-Romantic poets to the present, studied in their historical context and in aspects of enduring merit.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 207 – American Literature I
This course includes a survey of major works in American literature from Colonial diarists to Whitman.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 208 – American Literature II
This course includes a survey of major works in American literature from Dickinson to the present.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 209 – World Literature I
This course includes a comprehensive study of the foundational texts of world literature from antiquity to 1650. Representative works from Europe, East and South Asia, the Middle East, Africa, and Latin America will be read. Examples of readings include selections from the Bible, Homer’s Odyssey, the Ramayana, the Qur’an, and Sundiata. Through these texts, this course will expose students to a diverse range of cultures and their founding mythological and religious beliefs. Emphasis will be placed on understanding each work in its broader social and historical context and how these works, in turn, serve as common points of reference for the development of the cultures, literary traditions, and belief systems to which they give rise.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 210 – World Literature II
This course includes a study of major works of modern world literature from 1650 to the present. Through a comparative approach to representative works by European, East and South Asian, Middle Eastern, African, and Latin American writers, this course will expose students to a diverse range of cultures and literary practices. Emphasis will be placed on the social and historical context which informs the production and reception of these works. The relationship between that context and such major literary and cultural movements as Romanticism, Realism, Modernism, Postmodernism, and Postcolonialism will be examined as the basis for comparative study of these works. Major authors may include Rousseau, Tolstoy, Kafka, Pirandello, Lu, Neruda, Sembene, al-Sa’adawi, and Rushdie.
Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

ENG 213 – Advanced Writing
This course is designed to develop and refine the skills learned in ENG 101 and ENG 102 or ENG 122 that are essential for more advanced and extended writing required in academic, professional, and other settings. The course covers source evaluation, literary analysis, and exposition, along with a variety of other genres of communication. The course requires students to compose extended and revised writing that culminates with a final project.
Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

▲ = Fulfills a General Education Requirement

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**ENG 215 – Creative Writing**

This course provides an introduction to the various forms of creative writing, with emphasis on the development of superior craftsmanship in imaginative writing. Assignments are given to encourage students who have demonstrated advanced skills in writing to experiment with various forms. (Note: this course does not fulfill the 200-level literature requirement.)

Prerequisite(s): ENG 102 or division approval.
3 lecture hours per week
3 credit hours

**ENG 216 – Contemporary Literature**

This course includes a study of writers from 1945 to the present, presenting major literary movements and their philosophical implications. Emphasis is on those novelists, playwrights, and poets who represent the contemporary trends in form, content, and style.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 217 – Literature and the Arts I**

This course includes a period study of literature using the fine arts to reveal the artistic environment of each era. The fine arts, films, and other creative media are used to show how artists working in their various disciplines have handled the same themes as those which are read, from Ancient Greece to Impressionism.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 218 – Literature and the Arts II**

This course includes a period study of literature using the fine arts to reveal the artistic environment of each era. The fine arts, films, and other creative media are used to show how artists working in their various disciplines have handled the same themes as those which are read, from Impressionism to the present.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 219 – Introduction to Poetry**

This course includes an introductory study of the major poets and genres of poetry in English, beginning with early ballads and songs, visiting each of the major periods and styles, featuring in-depth views of major figures in the development of poetry (Shakespeare, Blake, Whitman, etc.) and concluding with a study of representative 20th Century voices. Technical aspects of poetry will be discussed, as well as the cultural context and enduring nature of poetic expression.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 220 – American Poetry**

This course includes an introductory study of the major poets and genres of American poetry, beginning with Colonial and Federal era poets, visiting each of the major periods and styles, featuring in-depth views of major figures in the development of American poetry (Whitman, Dickinson, Williams, Eliot, Ginsburg, etc.) and concluding with a study of representative 20th and early 21st Century voices. Technical aspects of poetry will be discussed, as well as the cultural context and enduring nature of poetic expression within a specifically American idiom.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 221 – Latinx Literature Studies**

This course explores a variety of professional and academic writing modes, pursuant to the social sciences. Students read, write, and conduct research in their respective fields. This course requires students to compose extended and revised writing that culminates in a final project.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

**ENG 222 – African American Literature II**

This course includes a survey of the selected writings by African Americans emphasizing the literary significance of each work and author, studied in its historical and sociological contexts from the Harlem Renaissance of the 1920s to the present proliferation of African American literature.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 223 – Introduction to Shakespeare**

This course includes an introductory study of Shakespeare as poet and dramatist, with close reading of the representative plays. The enduring nature of Shakespeare’s ideas is stressed.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 224 – Women Authors**

This course includes a study of major female authors, emphasizing the historical and literary development of female literary and authorship in British and American poetry (but not limited to the English-speaking world), drama, poetry, and fiction.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

**ENG 225 – Co-op Education Experience in English**

This course is a one-semester internship with a minimum of 135 hours in a position or internship with a local business or industry with or without compensation. The purpose is to acquire knowledge of industry and workplace relevant skills. Students must arrange placement with the Division Dean prior to enrolling in the course.

Prerequisite(s): Division approval required
135 contact hours
3 credit hours

**ENG 226 – African American Literature I**

This course includes a survey of selected writings by African Americans emphasizing the literary significance of each work and author, studied in its historical and sociological contexts from slave narratives and early folk tradition to the beginnings of the Harlem Renaissance of the 1920s.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 227 – Latinx Literature Studies**

This literature course explores Afro-Latinx, Indigenous, and Latinx populations of the Americas and their experiences in the U.S. through fiction, poetry, and other texts. Latinx is the gender-neutral alternative to Latino and Latina and is inclusive of people who identify as trans, queer, agender, non-binary, gender non-conforming or gender fluid. The course allows students to explore the multiplicity of cultures and societies of Latinx-America in ways that acknowledge the permeability or absence of borders. The course will improve knowledge of Latinx global politics, cultures, and nations as theorized, imagined, and practiced through Latinx Literature and Critical Theory.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 228 – African American Literature I**

This course includes a survey of the select- ed writings by African Americans empha- sizing the literary significance of each work and author, studied in its historical and sociological contexts from the Harlem Renaissance of the 1920s to the resurgent cultural self-consciousness of the 1960s to the present proliferation of African American literature.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 229 – Introduction to Poetry**

This course includes an introductory study of the major poets and genres of poetry in English, beginning with early ballads and songs, visiting each of the major periods and styles, featuring in-depth views of major figures in the development of poetry (Shakespeare, Blake, Whitman, etc.) and concluding with a study of representative 20th Century voices. Technical aspects of poetry will be discussed, as well as the cultural context and enduring nature of poetic expression.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 230 – American Poetry**

This course includes an introductory study of the major poets and genres of American poetry, beginning with Colonial and Federal era poets, visiting each of the major periods and styles, featuring in-depth views of major figures in the development of American poetry (Whitman, Dickinson, Williams, Eliot, Ginsburg, etc.) and concluding with a study of representative 20th and early 21st Century voices. Technical aspects of poetry will be discussed, as well as the cultural context and enduring nature of poetic expression within a specifically American idiom.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 231 – Latinx Literature Studies**

This literature course explores Afro-Latinx, Indigenous, and Latinx populations of the Americas and their experiences in the U.S. through fiction, poetry, and other texts. Latinx is the gender-neutral alternative to Latino and Latina and is inclusive of people who identify as trans, queer, agender, non-binary, gender non-conforming or gender fluid. The course allows students to explore the multiplicity of cultures and societies of Latinx-America in ways that acknowledge the permeability or absence of borders. The course will improve knowledge of Latinx global politics, cultures, and nations as theorized, imagined, and practiced through Latinx Literature and Critical Theory.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 232 – Women Authors**

This course includes a study of major female authors, emphasizing the historical and literary development of female literary and authorship in British and American poetry (but not limited to the English-speaking world), drama, poetry, and fiction.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

**ENG 233 – Co-op Education Experience in English**

This course is a one-semester internship with a minimum of 135 hours in a position or internship with a local business or industry with or without compensation. The purpose is to acquire knowledge of industry and workplace relevant skills. Students must arrange placement with the Division Dean prior to enrolling in the course.

Prerequisite(s): Division approval required
135 contact hours
3 credit hours

**ENG 234 – Advanced Writing for Social Sciences**

This course explores a variety of professional and academic writing modes, pursuant to the social sciences. Students read, write, and conduct research in their respective fields. This course requires students to compose extended and revised writing that culminates in a final project.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

**ENG 235 – Introduction to Shakespeare**

This course includes an introductory study of Shakespeare as poet and dramatist, with close reading of the representative plays. The enduring nature of Shakespeare’s ideas is stressed.

Prerequisite(s): ENG 102
3 lecture hours per week
3 credit hours

**ENG 236 – Women Authors**

This course includes a study of major female authors, emphasizing the historical and literary development of female literary and authorship in British and American poetry (but not limited to the English-speaking world), drama, poetry, and fiction.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

**ENG 237 – Co-op Education Experience in English**

This course is a one-semester internship with a minimum of 135 hours in a position or internship with a local business or industry with or without compensation. The purpose is to acquire knowledge of industry and workplace relevant skills. Students must arrange placement with the Division Dean prior to enrolling in the course.

Prerequisite(s): Division approval required
135 contact hours
3 credit hours

**ENG 238 – Advanced Writing for Social Sciences**

This course explores a variety of professional and academic writing modes, pursuant to the social sciences. Students read, write, and conduct research in their respective fields. This course requires students to compose extended and revised writing that culminates in a final project.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours

**ENG 239 – Co-op Education Experience in English**

This course is a one-semester internship with a minimum of 135 hours in a position or internship with a local business or industry with or without compensation. The purpose is to acquire knowledge of industry and workplace relevant skills. Students must arrange placement with the Division Dean prior to enrolling in the course.

Prerequisite(s): Division approval required
135 contact hours
3 credit hours

**ENG 315 – Advanced Writing for Social Sciences**

This course explores a variety of professional and academic writing modes, pursuant to the social sciences. Students read, write, and conduct research in their respective fields. This course requires students to compose extended and revised writing that culminates in a final project.

Prerequisite(s): ENG 102 or ENG 122
3 lecture hours per week
3 credit hours
ESL • English as a Second Language

THE INSTITUTE FOR INTENSIVE ENGLISH

Non-native students whose tests indicate insufficient fluency in English are required to take courses for Speakers of Other Languages, offered in the Institute for Intensive English or ENG 112.

Program of Study in the Institute for Intensive English

After placement testing, students enter an appropriate ESL level of instruction commensurate with their abilities. Upon completing each course, there is an exit test, to assess a student’s proficiency. Upon completion of Level 6, students take ENG 112, a two-semester sequence of college composition for ESL students (equivalent to ENG 101), along with other courses.

ESL 037 – Intermediate I Grammar/Writing
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The purpose of this course is to develop the students’ ability to write academic compositions using intermediate level grammar and to improve fluency in written and oral communication. Prerequisite(s): ESL Placement Test Co-requisite(s): ESL 038
5 lecture hours per week 5 institutional credits

ESL 038 – Intermediate I Reading/Listening/Speaking
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The purpose of this course is to improve students’ ability in academic reading, listening, and speaking in academic and US cultural contexts. Prerequisite(s): ESL Placement Test Co-requisite(s): ESL 037
5 lecture hours per week 5 institutional credits

ESL 047 – Intermediate II Grammar/Writing
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The purpose of this course is to develop the students’ ability to write academic compositions using intermediate level grammar and to improve fluency in written and oral communication. Prerequisite(s): ESL 037 or ESL Placement Test Co-requisite(s): ESL 048
6 lecture hours per week 6 institutional credits

ESL 048 – Intermediate II Reading/Listening/Speaking
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The purpose of this course is to increase students’ ability to work with written and oral reading and listening texts. Emphasis will be placed on authentic texts and academic discussions. Prerequisite(s): ESL 038 or ESL Placement Test Co-requisite(s): ESL 047 or ESL 037
5 hours per week 5 institutional credits

ESL 057 – Advanced I Grammar/Writing
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. This course teaches students to write clear, organized essays in a variety of rhetorical styles, incorporating ideas from academic sources. The course presents and develops the grammar and editing skills required to express ideas clearly. Prerequisite(s): ESL 047 or ESL 087 or ESL Placement Test
6 lecture hours per week 6 institutional credits

ESL 058 – Advanced I Reading/Listening/Speaking
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The focus is on reading comprehension and fluency for academic purposes with an emphasis on responding to narrative and expository texts. Additionally, this course develops advanced level conversation and listening skills in academic contexts. The goals are to help students enhance their proficiency in reading, speaking, and listening in order to succeed at the college level. Prerequisite(s): ESL 057 or ESL 086 or ESL Placement Test
6 lecture hours per week 6 institutional credits

ESL 068 – Advanced II Reading/Listening/Speaking
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. This course focuses on reading comprehension and fluency for academic purposes with an emphasis on responding to narrative and expository texts. Additionally, this course develops advanced level conversation and listening skills in academic contexts. The goals are to help students enhance their proficiency in reading, speaking, and listening in order to succeed at the college level. Prerequisite(s): ESL 058 or ESL 088 or ESL Placement Test
6 lecture hours per week 6 institutional credits

ESL 067 – Advanced II Grammar/Writing
This course is part of a multi-level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. This course teaches students to write clear, organized essays in a variety of rhetorical styles, incorporating ideas from academic sources. The course presents and develops advanced level grammar and editing skills required to express ideas fluently and accurately. Prerequisite(s): ESL 057 or ESL 087 or ESL Placement Test
6 lecture hours per week 6 institutional credits

ESL What are Institutional Credits? These are credits for developmental courses that provide the skills and confidence to succeed in college-level courses. Developmental courses are numbered 099 and below; they do not meet graduation requirements and will not transfer to four-year colleges.

▲ = Fulfills a General Education Requirement

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Learn English through a combination of listening, speaking, reading and writing classes. Classes are available for students at all levels. The ESL program helps students to improve their English to meet academic, and career goals. After placement testing, students are advised on the appropriate ESL level of instruction depending on their abilities. The placement test is available on all three campuses throughout the year.

To get started:

1. Complete a College application in person at the College Student Services Centers or online at www.ucc.edu.
2. After you apply, you will receive a College ID number.
3. Take the ESL Placement test. For testing hours go to www.ucc.edu/testing. Please bring your College ID number.
4. After you have tested, register for courses at the Student Services Center

For more information on testing, call (908) 965-6031 or (908) 709-7518, or visit www.ucc.edu/admissions/institute-for-intensive-english/
### ESL 074 – Conversation/ Pronunciation III
This course provides instruction in the advanced aspects of pronunciation, stress, rhythm, and intonation of spoken American English. This course reinforces communication skills in a conversational and academic setting. The goal is to expand aural/oral intelligibility and fluency. Access to a computer with Internet and sound recording capabilities, and a headphone with a microphone for recording is required either at home or in the ALC. This course meets the needs of advanced students of English as a Second Language.  
Prerequisite(s): ESL 047 and ESL 048, or by recommendation of professor  
3 lecture hours per week  
3 institutional credit hours

### ESL 077 – Accelerated Beginning Grammar/Writing
This course is an accelerated beginning-level ESL Level 1 and Level 2 Grammar/Writing course which is part of the second level of a six level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The emphasis of this course is to develop the students’ reading/listening/speaking skills in academic and U.S. cultural contexts. The goal is to help students enhance their language fluency in a more intensive setting.  
Prerequisite(s): Placement Test and permission of instructor  
Co-requisite(s): ESL 078, and ESL 079  
6 lecture hours per week  
6 institutional credit hours

### ESL 078 – Accelerated Beginning Reading/Listening/Speaking
This course is an accelerated beginning-level ESL Level 1 and Level 2 Reading/Listening/Speaking course which is part of the second level of a six level English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The emphasis of this course is to develop the students’ reading/listening/speaking skills in academic and U.S. cultural contexts. The goal is to help students enhance their language fluency in a more intensive setting.  
Prerequisite(s): ESL Placement Test and permission of instructor  
Co-requisite(s): ESL 077, and ESL 079  
6 lecture hours per week  
6 institutional credit hours

### ESL 079 – Beginning Individualized Language Learning
This course is a combined Level 1 and Level 2 individualized course, which enhances the students’ ability to develop and follow an independent learning plan with faculty assistance utilizing online and available software sources to address their individual language needs and develops the students’ ability to apply effective CALL learning strategies to complete their individualized language learning modules. The goals are to help students increase their language proficiency in order to succeed at the college level.  
Prerequisite(s): ESL Placement Test and permission of instructor  
Co-requisite(s): ESL 077 and ESL 078  
1 lecture hour per week  
1 credit hour

### ESL 083 – Advanced Reading in Business for ESL
This course is paired with and serves as a support course for ESL level six students enrolled in a sheltered section of Business 101. The purposes of the course are (1) to give students practice in reading and responding to academic texts in the area of business as presented in expository texts and (2) to help students develop reading skills and strategies they can apply in other academic work.  
Prerequisite(s): ESL 057 and ESL 058, or ESL Placement Test  
Co-requisite(s): BUS 101 and ESL 067  
3 lecture hours per week  
3 institutional credit hours

### ESL 084 – Advanced Reading in Psychology for ESL
This course is paired with and serves as a support course for ESL level six students enrolled in a sheltered section of Psychology 101. The purposes of the course are (1) to give students practice in responding to expository texts, fiction and articles in the area of psychology and (2) to help students develop reading skills and strategies they can apply in other academic work.  
Prerequisite(s): ESL 057 and ESL 058, or ESL Placement Test  
Co-requisite(s): PSY 101 and ESL 067  
3 lecture hours per week  
3 institutional credit hours

### ESL 086 – Reading II in Allied Health for ESL
ESL 086 is a Level 6 advanced reading course that is designed for students whose native language is not English and who plan to major in Allied Health careers. This course is grouped together with a specific sequence of ESL courses and a Biology course (ESL 061/062, ESL 096 and BIO 006) which focus on improving English language skills in the context of Anatomy and Physiology/Allied Health. The purpose of this course is to apply advanced reading skills and strategies for comprehending and responding to academic texts.  
Prerequisite(s): ESL 057 and ESL 058, or ESL Placement Test  
Co-requisite(s): ESL 067 and BIO 006  
3 lecture hours per week  
3 institutional credit hours

### ESL 087 – Accelerated Intermediate Grammar/Writing
This course is an accelerated Levels 3 and 4 intermediate grammar/writing English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The purpose of this course is to introduce and develop the students’ ability to write academic compositions. Students will use intermediate level reading/listening/speaking skills in the context of Anatomy and Physiology/Allied Health. The purpose of this course is to apply advanced reading skills and strategies for comprehending and responding to academic texts.  
Prerequisite(s): ESL 077 or ESL Placement Test, and permission of instructor  
Co-requisite(s): ESL 088 and ESL 089  
6 lecture hours per week  
6 institutional credits

### ESL 088 – Accelerated Intermediate Reading/Listening/Speaking
This course is an accelerated Levels ¾ intermediate academic reading, listening, speaking English for Academic Purposes (EAP) sequence designed for students whose native language is not English. The purpose of this course is to introduce academic reading and listening texts. Emphasis will be placed on authentic texts and academic discussions.  
Prerequisite(s): ESL 078 or ESL Placement Test, and permission of instructor  
Co-requisite(s): ESL 087 and ESL 089  
6 hours per week  
6 institutional credits
ESL 089 – Intermediate Individualized Language Learning

This is an accelerated level 4 individualized course which enhances the students’ ability to develop and follow an independent learning plan utilizing online sources to address their individual language needs. The purpose of this course is to develop the students’ ability to apply effective CALL learning strategies while completing their individualized language learning modules. Prerequisite(s): ESL 077 or ESL Placement Test, and permission of instructor. Co-requisite(s): ESL 087 and ESL 088. 1 lecture hour per week. 1 institutional credit hour.

ESL 097 – Accelerated Advanced ESL Grammar/Writing

This course is an accelerated ESL Level 5 and Level 6 Grammar/Writing. This course improves the students’ ability to write academic essays in a variety of rhetorical styles that are clear and organized expressions of ideas. The emphasis is on responding to academic texts/videos, paraphrasing, and summarizing in their essays. Additionally, this course develops the students’ ability to use advanced level grammar and editing skills needed for clarity in writing. The goals are to help students enhance their language proficiency in order to succeed at the college level. Prerequisite(s): ESL 047 and ESL 048, or ESL 087 and ESL 088, and permission of instructor. Co-requisite(s): ESL 098 and ESL 099. 6 lecture hours per week. 6 institutional credit hours.

ESL 098 – Accelerated Advanced ESL Reading/Academic Listening and Speaking

This course is an accelerated ESL Level 5 and Level 6 Reading/Academic Listening and Speaking. This course focuses on reading comprehension and fluency for academic purposes. The emphasis is on responding to narrative and expository texts. Additionally, this course develops advanced level conversation and listening skills, utilizing academic contexts. The goals are to help students enhance their language proficiency in order to succeed at the college level. Prerequisite(s): ESL 047 and ESL 048, or ESL 087 and ESL 088, and permission of instructor. Co-requisite(s): ESL 097 and ESL 099. 6 lecture hours per week. 6 institutional credit hours.

ESL 099 – Advanced ESL Individualized Language Learning

This course is a Level 6 individualized course, which enhances the students’ ability to develop and follow an independent learning plan utilizing online sources to address their individual language needs and develops the students’ ability to apply effective CALL learning strategies to complete their individualized language learning modules. The goals are to help students increase their language proficiency in order to succeed at the college level. Prerequisite(s): ESL 047 and ESL 048, or ESL 087 and ESL 088, and permission of instructor. Co-requisite(s): ESL 097 and ESL 098. 1 lecture hour per week. 1 institutional credit hour.

ESP 100 – Introduction to eSports Management

This course introduces students to the business model framework of the eSports industry. The course also examines the essential foundation of how to create value via solving problems and fulfilling consumers’ wants and needs in the industry. The course assumes rapid cycles of industry shock and disruption and as such, particular attention will be paid to the unique operational challenges faced by managers and other individuals in the industry, depending on their roles and functions in the organization. 3 lecture hours per week. 3 credit hours.

ESP 230 – Principles of eSports Management and Event Management

This course focuses on the management skills of planning, organizing, leading and controlling eSports events. The management skills needed to identify and understand the techniques used to analyze and categorize the risks that come with managing eSports events is also a focus of this course. Emphasis will be placed on the ethics and social responsibility and management skills relevant to the industry, including the eSports event manager’s role in the decision-making process, motivation of people, leading change and innovation. Additional emphasis will be placed on the management skills gained from the course concerning how to manage different stakeholders and how to distinguish expectations related to scheduled tasks and budgets. Prerequisite(s): ENG 097, if required. 3 lecture hours per week. 3 credit hours.

FIA 103 – Fundamentals of Music

This course focuses on the acquisition of basic music skills including learning to read music, playing simple instruments, conducting and teaching songs by note. This course should be of particular interest to those considering a career in elementary education. 3 lecture hours per week. 3 credit hours.

FIA 104 – Fundamentals of 2D Design

This technology-based studio course will introduce students to the conscious and thoughtfully planned arrangement of graphic elements including line, shape, color, texture, and type. Students will demonstrate their artistic skills using photography and computer applications. Additionally, this course introduces students to the basic principles of design including unity, balance, hierarchy, rhythm, and illusion. The basics of composition in a digital environment will be addressed. 3 lecture hours per week. 3 credit hours.

FIA 105 – Music Appreciation

This course focuses on development of a greater sensitivity for the “Aesthetic Experience” through music. The emphasis is on discussions of and listening to classical, non-western and women composers in music. This course also includes discussions of and listening to rock and jazz, where appropriate. 3 lecture hours per week. 3 credit hours.
Learn English through a combination of listening, speaking, reading and writing classes. Classes are available for students at all levels. The ESL program helps students to improve their English to meet academic, and career goals. After placement testing, students are advised on the appropriate ESL level of instruction depending on their abilities. The placement test is available on all three campuses throughout the year.

To get started:
1. Complete a College application in person at the College Student Services Centers or online at www.ucc.edu.
2. After you apply, you will receive a College ID number.
3. Take the ESL Placement test. For testing hours go to www.ucc.edu/testing. Please bring your College ID number.
4. After you have tested, register for courses at the Student Services Center.

For more information on testing, call (908) 965-6031 or (908) 709-7518, or visit www.ucc.edu/iie

Union County College does not discriminate and prohibits discrimination, as required by state and/or federal law, in all programs and activities, including employment and access to its career and technical programs. Accredited by The Middle States Commission on Higher Education.
FIA 107 - Introduction to Dance
This course begins with the explanation of the elements of Modern Dance—time, space, and energy. During the last half of the semester these elements are applied to the fundamental study of ballet. The course is taught through basic studio movement (warm-up, technique, and dance phrases) and through concert attendance, readings, videotapes, lectures, and discussions.

3 lecture hours per week
3 credit hours

FIA 108 - Appreciation of Art
This course is a lecture course examining the aesthetics of the visual arts. The course will focus on the many ways to see and understand two and three dimensional art forms. Studies include painting, sculpture, drawing, photography, the crafts, and other visual expressions examined through formal, iconographic, and conceptual means. A variety of art will be covered ranging from western, eastern, African, feminist, and other alternative, culturally significant art forms.

3 lecture hours per week
3 credit hours

FIA 109 - Introduction to Drawing
This course provides a study of basic visual elements in drawing, emphasizing observation, selection, and recording of perceptual form. Value relationships, spatial organization, linear gesture, composition, balance, and the human figure are explored using graphic media.

3 lecture hours per week
3 credit hours

FIA 110 - Introduction to Painting
This course provides an exploration of the basic visual elements using painting media and techniques.

3 lecture hours per week
3 credit hours

FIA 111 - Art History Survey I
This course offers an historical and visual survey of art and architecture from prehistoric beginnings through the Medieval Period. Study includes aesthetic, cultural, historic, and formal examination of works of art in a chronological, evolutionary sequence. A considerable amount of time is spent focusing on diversity and multicultural issues that have defined and shaped the process of development historic to human creative activity. Lecture course with supplemental visual presentation.

3 lecture hours per week
3 credit hours

FIA 112 - Art History Survey II
This is a lecture course with supplemental visual presentation of art and architecture from the Gothic Period through the 19th Century. Study includes an aesthetic, formal, historic, and cultural examination of painting, drawing, sculpture, and architecture in a chronological, evolutionary sequence. Time is spent focusing on how issues of cultural diversity and gender define and shape creative activity. Lecture course with supplemental visual presentation.

3 lecture hours per week
3 credit hours

FIA 115 - Fundamentals of Figure Drawing
This course offers advanced drawing study using graphic media as a tool for expressive interpretation of the human figure and other visual problems. Study focuses on the tools, techniques, concepts, and approaches of two-dimensional image making.

3 lecture hours per week
3 credit hours

FIA 116 - Fundamentals of Painting
This course offers advanced study of painting concepts and technical processes involving light, shape, form, space, and composition.

3 lecture hours per week
3 credit hours

FIA 117 - Survey of Music in the Twentieth Century
This course offers an examination of the development of Classical, Film, Musical Theater, Non-Western, Jazz and Rock music composed in the twentieth century, including Women, Latino, and African-American composers and their contribution to twentieth-century music.

3 lecture hours per week
3 credit hours

FIA 119 - Introduction to Architectural History
This course provides the student with visual literacy and an introduction to aesthetic concepts, its story, and methodologies within Western and Non-Western architecture. Integrated are the architectural processes, techniques, and their deployment within the literary and cultural history. A variety of art historical sources will be referenced to develop critical thinking, critiquing, and writing. The course will cover the period from primitive building structures, the Egyptian and Middle East to the Greco-Roman, early Christian, Islamic, African, Asian, Romanesque and Gothic.

3 lecture hours per week
3 credit hours

FIA 120 - Architectural History
This course provides the student with visual and literary vocabulary that adds to the first semester course a fundamental perception of the aesthetics and construction techniques involved with the art of architecture. Included are the architectural advancements and styles within a variety of global cultural and literary history gleaned from a variety of sources. This will enable the student to critically think when writing the term paper. This course covers the occasion of the renaissance to the baroque, neo-classical and the Age of Reason, 19th century, and the modern period up to the post-modern, global period.

3 lecture hours per week
3 credit hours

FIA 121 - Introduction to Architectural Rendering
This course offers an study of graphic styles used in architecture and development of perspective renderings of interior and exterior buildings.

Prerequisite(s): FIA 109 or permission of instructor
3 lecture hours per week
3 credit hours

FIA 122 - Introduction to Film Photography
This course provides an introduction to photography principles and practices including 35mm camera operation, film development, print processing, color correcting and analysis, and some contemporary issues of photographic practice in the arts.

Prerequisite(s): Students must have their own appropriate camera (or access to one)
3 lecture hours per week
3 credit hours

FIA 123 - Introduction to Color Film Photography
This course offers an introduction to color photography involving film exposure, print processing, color correcting and analysis, with an exploration of contemporary issues/techniques of color photography.

Prerequisite(s): FIA 122
3 lecture hours per week
3 credit hours

FIA 124 - Theater Appreciation
This course provides an introduction to the basic social, artistic, and technical elements of theater. Topics include theater as storytelling; dramatic genres, styles, and structures; the various physical theater spaces; and the contributions of the playwright, designers, director, actors, and audience to the theatrical process.

3 lecture hours per week
3 credit hours
FIA 125 – Introduction to Digital Imaging
This course provides students with an introduction to the technical and creative aspects of manipulating photographic and digitally generated images in a Macintosh computer environment utilizing state of the art hardware and software.
3 lecture hours per week
3 credit hours

FIA 127 – Introduction to Acting
This course offers basics of voice, movement, and interpretation. Course includes development of imagination and observation leading to the ability to present these skills in all forms of dramatic presentations.
3 lecture hours per week
3 credit hours

FIA 128 – Introduction to Illustration
This course is an introductory studio course which provides the student with a basic vocabulary and fundamental understanding of the concepts, techniques, and skills involved in the visual arts communication field of illustration. Along with a historic and contemporary examination of illustration, the student is taught to differentiate between product, journalistic, and advertising forms of illustration. Considerable time is spent on specific studio approaches to illustration including use of pencil and dry media, pen and ink, watercolor, oil, gouache, tempera, acrylic painting techniques and applied computer technology.
Prerequisite(s): FIA 109 or FIA 110
3 lecture hours per week
3 credit hours

FIA 130 – Introduction to Graphic Design
This course is an introductory technology-based design studio course which provides a basic understanding of the techniques, concepts, and processes involved in the field of Graphic Design. Topics include graphic design history and its impact on the commercial design profession, typography, image editing, color theory, photography, and aesthetics. Students will gain skills in designing various applications including print and multimedia. Careers and opportunities in graphic design will also be discussed.
3 lecture hours per week
3 credit hours

FIA 132 – Introduction to Dramatic Literature
This course offers a study of the classics of European and Asian drama as both "text" and "event." The course includes readings of selected masterworks together with scene study, criticism, and historical discussion.
Prerequisite(s): ENG 101
3 lecture hours per week
3 credit hours

FIA 220 – Introduction to History of Photography
A course examining the history of photography from 1839 to the present. Emphasis is placed on a study of the evolution of photographic processes, art historical and sociological impact, trends and major artists.
3 lecture hours per week
3 credit hours

FIA 222 – Advanced Black-and-White Film Photography
This course is an advanced black and white photography course with an emphasis on the zone system exposure and printing methods. Course includes an introduction to large format cameras and studio lighting.
Prerequisite(s): FIA 122
3 lecture hours per week
3 credit hours

FIA 225 – Advanced Digital Imaging
This course provides students with advanced technical training in the field of digital imaging and an opportunity to apply learned skills to create digitally manipulated images from two-dimensional and three-dimensional photographic and computer generated sources. An integrated component of this course focuses on the use of "state of the art" digital hardware and software to output high resolution, exhibition quality, ink jet and dye sublimation images on a diversity of media. Students are required to complete study in Digital Imaging for Art and Photography I prior to enrollment in the Advanced Digital Imaging for Art and Photography course.
Prerequisite(s): FIA 125
3 lecture hours per week
3 credit hours

FIA 227 – Advanced Acting
This course offers advanced work on developing voice, body, and imagination as components of the actor's "instrument". Course includes discovering styles suitable for works from different periods and the relationship between the actor and the text. Course also includes an examination of tradition and techniques of the principal modes of theater: tragedy, comedy, realism, fantasy, and farce.
Prerequisite(s): FIA 127
3 lecture hours per week
3 credit hours

FIA 230 – Advanced Graphic Design
This technology-based studio course is an advanced course in graphic design. Students will learn advanced design skills in computer design production for print and multimedia. A capstone project will be the focus of the course in addition to learning more about the importance of research and client interaction. Students will work on their capstone project with a client or the instructor. The capstone project will include the planning of a complex commercial concept that is digitally created and produced. Students will also gain knowledge of the application process for current careers and opportunities in graphic design. Advanced printing techniques and multimedia applications will also be addressed.
Prerequisite(s): FIA 130
3 lecture hours per week
3 credit hours

FIA 232 – Modern and Contemporary Dramatic Literature
This course offers an analysis of modern and contemporary dramatic literature from the Birth of Realism to the 21st Century. The course includes readings of selected masterworks together with dramatic theory, criticism, historical discussion, and an emphasis on diversity.
Prerequisite(s): ENG 101
3 lecture hours per week
3 credit hours

FIA 290 – Co-op Education Experience in Theater or Visual Arts
This course is a one-semester internship with a minimum of 135 hours in a business position with a local theater-related or visual arts-related business or industry, with or without compensation, in order to acquire knowledge of industry and workplace relevant skills. This course is only open to matriculated students in the Theater Arts or Visual Arts (options off of Liberal Arts) A.A. degree programs. Students must arrange placement with the Division Dean prior to enrolling in the course.
Prerequisite(s): Division approval required
135 contact hours
3 credit hours

▲ = Fulfills a General Education Requirement

(908)709-7000  UNION COUNTY COLLEGE 2021-2022 CATALOG 187
FRE • French

▲ FRE 101 – Beginning French I
This course includes development of the fundamental skills of understanding, speaking, reading, and writing. Listening practice is available. Media are incorporated into the classroom experience and web-based materials are a required part of the course. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.
Prerequisite(s): FRE 101, or two years high school French
3 lecture hours per week
3 credit hours

▲ FRE 102 – Beginning French II
This course is a continuation of FRE 101. Media are incorporated into the classroom experience and web-based materials are a required part of the course. This course is not generally open to native French speakers.
Prerequisite(s): FRE 101 or two years high school French
3 lecture hours per week
3 credit hours

▲ FRE 111 – Intermediate French I
This course offers review of fundamental skills of understanding, speaking, reading and writing. Media are incorporated into the classroom experience and web-based materials are a required part of the course. This course is not generally open to native French speakers.
Prerequisite(s): FRE 101, or two years high school French
3 lecture hours per week
3 credit hours

▲ FRE 112 – Intermediate French II
This course is a continuation of FRE 111. Not generally open to native French speakers.
Prerequisite(s): FRE 111
3 lecture hours per week
3 credit hours

FRE 115 – French Culture and Civilization (Foreign Study)
This course includes a comprehensive survey of French culture and civilization including geography, social and economic factors. The achievement in painting, sculpture and architecture will be examined. This course is offered only in conjunction with a trip to France or French Canada and fulfills one semester of the French Modern Language requirement.
3 credit hours

▲ FRE 121 – Advanced French I
This course includes further development of skills in reading, composition and conversation.
Prerequisite(s): FRE 112, or 3 years high school French or its equivalent
3 lecture hours per week
3 credit hours

▲ FRE 122 – Advanced French II
This course is a continuation of FRE 121.
Prerequisite(s): FRE 121
3 lecture hours per week
3 credit hours

FST • Fire Science Technology

FST 102 – Building Construction
This course provides professional fire service personnel and individuals in related fields with an understanding of the basic principles of building construction. It presents background information concerning the national and local building codes, the national fire codes and how they affect modern design and building construction. It relates these principles to practical problems of the fire service.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 103 – Fire Protection
This course provides an introduction to general aspects of fire protection. Topics include the behavior of fire, the extinguishing agents used in suppressing fire, and the strategies used to prevent fires. The roles of public and private fire protection services are also analyzed.
3 lecture hours per week
3 credit hours

FST 105 – Fire Prevention
This course provides a study of the basic principles of fire prevention and inspection with emphasis on the recognition of fire hazards in commercial and industrial occupancies, the various protection systems dealing with these hazards, the use of practical test facilities, and the enforcement of building laws, fire ordinances, and municipal codes.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 106 – Fire Fighting Tactics
This course provides an examination of the tactical capabilities and limitations of company-level operations at emergency incidents. Particular attention is given to the operation of the basic tactical units of fire departments: Engine, Ladder, and Rescue companies.
3 lecture hours per week
3 credit hours

FST 107 – Hazardous Materials
This course provides professional fire and safety personnel with an understanding of the hazards found in industry and techniques used to control them. Topics include a study of the use, proper storage, and transportation of hazardous materials, with particular emphasis placed on safety measures to be followed when handling these materials at a fire or other emergency.
3 lecture hours per week
3 credit hours

FST 108 – Fire Hydraulics
This course provides fire protection personnel and professional firefighters with an understanding of the properties, principles, and concepts of fluid materials, particularly water. The course presents a background of the basic properties of fluids, pressures, flows, pumps, and practical applications.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 109 – Fire Protection Systems
This course provides an introduction to fire detection and suppression devices. The design, operation and maintenance of, and code requirements for, the various systems are examined, with special emphasis on the special problems created by hazardous occupancies.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 111 – Fire Causes and Detection
The course provides students with an understanding of the history, development, and philosophy of fire investigation and detection; the gathering of evidence and development of technical reports; and the processing of criminal evidence and examination of criminal procedures as they relate to arson investigation.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 112 – Emergency Rescue Operations
This course provides students with instruction in various aspects of rescue operations. Topics include responsibilities of the officer in command, the use of specialized rescue tools and equipment, problems of vehicle rescue, and techniques for handling casualties.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours
FST 113 – Fire Department Organization and Management
This course provides students with the basic concepts of management and organization of fire departments. It examines the structure and types of fire department organizations, the functions of the manager, and the role of leadership.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 114 – Legal Aspects of Fire Protection
This course provides a study of legal rights and obligations, liability concerns and responsibilities involving fire department organizations carrying out their duties.
3 lecture hours per week
3 credit hours

FST 115 – Insurance Grading Schedules
This course provides an understanding of all aspects of fire insurance with a major emphasis on its function, type of carriers, provisions, and how rating systems are established. Additionally, it examines handling of risk and settlement claims.
3 lecture hours per week
3 credit hours

FST 116 – Fire Safety Code
This course provides a study of the history and development of fire safety codes, with an emphasis on the nature and scope of legal statutes and related codes in fire protection control.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

FST 119 – Incident Command
This course provides a study of the command and control of operations at major incidents or disasters. The role of the fireground or incident commander is stressed.
Major features include central control over coordination of human and material resources with particular recognition given to the safety of fire personnel and disaster victims.
Prerequisite(s): FST 106
3 lecture hours per week
3 credit hours

FST 218 – Fireground Strategies and Concepts
This course provides a study of the advanced tactical procedures and underlying strategic concepts required for effective operations at emergency incidents. Emphasis is on multi-unit and special emergency operations.
Prerequisite(s): FST 106
3 lecture hours per week
3 credit hours

GDP • Game Design and Development

GDP 101 – Fundamentals of Game Design
This course covers the many aspects involved in the process of designing a game. Topics included in this course are the role of the game designer, elements of a game, types of players, game mechanics, game balance, story in games, game design documents, game pitches, and prototypes.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

GDP 112 - Introduction to Game Programming
This course builds on the fundamental principles of game design and teaches students the basics of game programming using a modern professional game engine. Students will learn the concepts and features of object-oriented programming using a computer language commonly used in the game industry. The course focuses on various techniques used in developing prototypes of 2D and 3D games.
Prerequisite(s): GDP 101, and CST 115 or CST 161
3 lecture hours per week
3 credit hours

GDP 115 – The Business of Game Development
This course covers many aspects related to the business of game development. Students learn about legal issues, publishing, marketing, entrepreneurship, and current topics in the game industry. Some concepts covered include intellectual property rights, branding, public relations, contract negotiations, choosing a business entity, and writing business and marketing plans. This course will help students gain a broader understanding of the game development industry.
Prerequisite(s): GDP 101
3 lecture hours per week
3 credit hours

GDP 201 – Digital Animation for Games
This course provides students with animation techniques using a modern professional game engine and computer graphics software. Students will cover the principles of 2D and 3D animation and its use in game design. Topics include 2D sprite animation, 3D skeletal animation, particle systems, physics in animation, and creating programmatic animations.
Prerequisite(s): GDP 112
3 lecture hours per week
3 credit hours

GDP 202 – Game Design and Development Capstone
In this course students will develop a game from conception to completion in a team environment. Students will be expected to document their work through all stages of development and to apply project management techniques with their group. This capstone project can then be used by students looking to show their portfolio to potential employers or for students who plan to publish their game.
Prerequisite(s): GDP 201, and GDP 212
Corequisite(s): GDP 280
3 lecture hours per week
3 credit hours

GDP 212 – Artificial Intelligence for Games
This course further explores game programming using a modern professional game engine by covering artificial intelligence techniques and algorithms used in games. Topics include finite state machines, sensory systems, path following, steering, obstacle avoidance, flocking, behavior trees, navigation meshes, and machine learning.
Prerequisite(s): GDP 112
3 lecture hours per week
3 credit hours

GDP 215 – 3D Game Graphics Programming
This course provides students with the fundamentals of 3D graphics programming for games and interactive media using a modern professional game engine. Students will explore various topics of shader programming, post-processing effects, lighting models, physically based rendering, and grab passes.
Prerequisite(s): GDP 112
Corequisite(s): GDP 280
3 lecture hours per week
3 credit hours

GDP 280 – Game Design and Development Capstone
This course provides students with the fundamentals of game design and development using a modern professional game engine. Students will explore various topics of shader programming, post-processing effects, lighting models, physically based rendering, and grab passes.
Prerequisite(s): GDP 112
Corequisite(s): GDP 215
3 lecture hours per week
3 credit hours

GEO • Geography

GEO 201 – World Geography
This course is an introduction to the physical and political geography of the world. It explores how the earth’s physical features, natural resources, and climate connect with economics and politics to shape human culture. The major world geographic regions are also explored.
Co-requisite(s): ENG 101, or permission of Division Dean’s office
3 lecture hours per week
3 credit hours
## COURSE DESCRIPTIONS

### GER • German

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisite(s)</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 101</td>
<td>Beginning German I</td>
<td>ENG 097, if required</td>
<td>3</td>
<td>This course includes development of the fundamental skills of understanding, speaking, reading, and writing. Learning practice is available. Media are incorporated into classroom experience. Native speakers of German must get approval of the instructor.</td>
</tr>
<tr>
<td>GER 102</td>
<td>Beginning German II</td>
<td>GER 101 or two years high school German</td>
<td>3</td>
<td>This course is a continuation of GER 101. Media are incorporated into classroom experience. Native speakers of German must get approval of the instructor.</td>
</tr>
<tr>
<td>GER 105</td>
<td>Conversational German I</td>
<td></td>
<td>3</td>
<td>This course is an introduction to GER 105. Media are incorporated into classroom experience. Native speakers of German must get approval of the instructor.</td>
</tr>
</tbody>
</table>

### GEY • Geology

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisite(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>GEY 101</td>
<td>Physical Geology</td>
<td>ENG 097, if required</td>
<td>3</td>
<td>This course is a study of the origin and nature of rocks and minerals, volcanism and metamorphism, surficial processes of erosion and deposition, problems of water supply and pollution. One or more all day field trips are required in addition to regularly scheduled lab sessions.</td>
</tr>
<tr>
<td>GEY 102</td>
<td>Historical Geology</td>
<td></td>
<td>3</td>
<td>This course includes development of the skills of understanding, speaking, reading, and writing. Learning practice is available. Media are incorporated into classroom experience. Native speakers of German must get approval of the instructor.</td>
</tr>
</tbody>
</table>

### GOV • Government

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>GOV 201</td>
<td>American Government and Politics</td>
<td>ENG 097</td>
<td>3</td>
<td>This course provides a comprehensive analysis of American political institutions on the federal, state, and local levels. Topics covered include the U.S. Constitution, Federalism, public opinion, political parties, elections, pressure groups, and the role of the citizen in the American Political process.</td>
</tr>
<tr>
<td>GOV 202</td>
<td>American National Government</td>
<td>ENG 097</td>
<td>3</td>
<td>This course provides a comprehensive analysis of the organization, functions, and administration of the American national government. Topics include the Presidency, Congress, Judiciary, civil rights and civil liberties, constitutional law, and domestic and foreign policy.</td>
</tr>
<tr>
<td>GOV 203</td>
<td>Urban Government and Politics</td>
<td>ENG 097</td>
<td>3</td>
<td>This course provides an introduction to urban government and politics. It looks at the political structures, forces and issues that affect the urban community. Topics include machine politics, the politics of reform, the service challenge, and civil disorders.</td>
</tr>
</tbody>
</table>

### HIS • History

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisite(s)</th>
<th>Credit Hours</th>
<th>Description</th>
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<tbody>
<tr>
<td>HIS 101</td>
<td>Introduction to Western Civilization I</td>
<td>ENG 097</td>
<td>3</td>
<td>This course examines the history of Western Civilization from ancient times to c. 1600. It covers the development of the Greek, Roman, Medieval, and Early Modern Civilization. Political, economic, social, religious, and cultural factors are considered.</td>
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</tbody>
</table>
**HIS 102 – Introduction to Western Civilization II**
This course continues the exploration of Western Civilization from the early modern period to the present. It discusses such topics as absolutism, constitutionalism, modern science, revolution, industrialization, colonialism, the World Wars, totalitarianism, the Cold War, and the forming of a new global civilization. Political, economic, social, religious, and cultural factors are considered.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 103 – Introduction to World History I**
This course is a study of the major elements of world history from ancient times to 1500 with attention to prehistoric humans; the irrigation societies of Mesopotamia, Egypt, and India; the classical civilizations of Greece, Rome, India, and China; the later cultures of Byzantium, Islam, East Asia, Africa, the Americas, and Europe.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 104 – Introduction to World History II**
This course is a study of the major elements of world history from 1500 to the present with attention to the Protestant Reformation, Absolutism, the rise of Enlightenment, the impact of revolution, democracy and nationalism, the world wars, and challenges faced by contemporary humankind in an age of global interdependence.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 105 – Afro-American History I**
This course is a history of Black people from their advent in the New World to the Civil War. The African heritage and its contributions to the development of African-American culture are considered along with the slave trade and the effects of the institution of slavery. Also included are the early struggles for emancipation, resistance to slavery, the Abolitionist movement viewed from both the black and white perspective, the reasons behind the Emancipation Proclamation, and the impact of the Civil War on American society. In order to satisfy degree requirements, students may substitute this course for HIS 101 or HIS 201 with permission of Division Dean office.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 106 – Afro-American History II**
This course is a history of Black people from Reconstruction to the present. The promise and disappointment of freedom in the post-Civil War world and the emergence of the new black leadership in the struggle for equality and dignity are considered. From Booker T. Washington’s cooperative approach to the present, the student studies the forces that are shaping the emergence of Black people as full participants in American Life. In order to satisfy degree requirements, students may substitute this course for HIS 102 or HIS 202 with permission of Division Dean office.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 201 – United States History to 1865**
This course is a survey of U.S. history from its colonial foundations to the Civil War with a focus on major political, economic, social, and intellectual developments of the period.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 202 – United States History Since 1865**
This course is a survey of U.S. history from Reconstruction to the present with a focus on the major political, diplomatic, economic, social, and intellectual developments of the period.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 205 – British History from 1600 to the Present**
This course is a study of major political, economic, social and cultural events and issues occurring from the end of the Tudor period to the present. Emphasis is on the unification of the national state, the growth of parliamentary democracy and its effects on the American Revolution, the Industrial Revolution, the growth and decline of the Empire, the Welfare State, and the entrance into the Common Market.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 209 – Twentieth Century European History**
This course examines the economic, social, and political trends of the twentieth century. The focus is on Europe, but attention is also given to the impact of the two world wars and their after-effects on the rest of the world.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 215 – The American Experience in the Twentieth Century**
This course examines twentieth-century America covering major events, trends, and ideas. Flexibility within the course permits focusing on themes of special interest such as the Great Depression, Urbanization, the Cold War, the Counterculture, and the complexities of current national life.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 225 – Women in American History**
This course is a survey of the history of women in the United States from the 17th century to the present. Students will approach women’s history as both an integral part of the nation’s past as well as a distinct subject of historical investigation. Topics include women’s changing roles in family and economic life, political participation and the fight for suffrage, and the influence of race, ethnicity, and socioeconomic status on gender identity.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 230 – Latin American History**
This course is a broad survey of the history of Latin America from pre-Colombian civilizations to the present. Political, economic, ideological, social and cultural factors will be considered, as well as the interaction between Latin America and the global society.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 270 – The Classical Heritage of Greece and Rome**
This course is an introduction to classical Greek and Roman history. Topics include the rise of the Greek city-states, the Trojan War, the political influence of Sparta and Athens, the Greco-Persian relationship, and the Ptolemaic War. Students will also consider the historical significance of Alexander the Great, the rise and fall of the Roman Republic, and the spread of empire during Rome’s imperial stage. The course will conclude with a look at Roman culture in the second millennium and the rise of Christian Europe in the fourth century B.C.E.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

▲ = Fulfills a General Education Requirement
**HIS 279 – New Jersey History**
This course covers the history of New Jersey from early exploration and settlement to the present, with more emphasis on the origins and establishment of New Jersey as a colony and a state, and the role the state has played in the development of the nation. The historical background will serve as a springboard for the study of the 19th and 20th century industrial growth that would make New Jersey one of the most influential states in the nation.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 281 – The Era of the American Revolution**
This course is a broad-based introduction to early American society and its major event the American Revolution. The course explores the cultural, social, economic, ideological, and political development of the century which ultimately led to resistance, armed rebellion, and the creation of the American republic.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

**HIS 290 – Co-op Education Experience in History**
This course is a one-semester internship with a minimum of 135 hours in a position or internship with a local museum, historic site, archives, or nonprofit educational or media organization with or without compensation. The purpose is to acquire relevant skills and hands-on experience doing the work of history.
Prerequisite(s): Division approval required
135 contact hours
3 credit hours

**HIT • Health Science Technology**

**HIT 101 – Introduction to Healthcare Information Technology**
This course provides an overview of healthcare delivery and the structure of healthcare organizations in the United States. It includes a discussion of the development and analysis of health records and the role of the health information technician. The relationship between a health record and reimbursement is also discussed. This course utilizes specialized software for hands-on practice with an electronic health record.
Prerequisite(s): Acceptance into the Health Information Technology Program
3 lecture hours per week
3 credit hours

**HIT 102 – Coding & Classification I**
This course focuses on disease coding using the International Classification of Diseases 10th Edition, Clinical Modification (ICD-10-CM) with an emphasis on the use and applications of coding principles and classification systems in the healthcare environment. The review of medical records to identify diagnoses with treatment, and/or services performed, and the correct sequencing for optimal reimbursement will also be discussed.
Prerequisite(s): ALH 161
Co-requisite(s): HIT 201
4 lecture hours per week
4 credit hours

**HIT 110 – Legal Issues In Healthcare**
This course focuses on the legal and ethical aspects of the health record and health information technology. The implications of healthcare legislation for the health information practitioner, various healthcare providers, and government agencies are emphasized. The course includes an in-depth study of the confidentiality of health information as well as the standards, regulations, and laws that govern the release of health information. It also covers the role of the medical record department in monitoring and implementation of legal changes, liability issues, and risk management.
3 lecture hours per week
3 credit hours

**HIT 111 – Healthcare Information Standards**
This course introduces the student to health data structure, content, and standards. The collection and maintenance of health data; policies and procedures; verification and currency of data; integrity of data and data sources for patient care, management, billing, and registries as well as data reporting to meet organizational needs will be discussed.
3 lecture hours per week
3 credit hours

**HIT 201 – Healthcare Information Technologies**
This course introduces computer applications in health information systems, including data entry, display, storage, and retrieval. Students acquire an understanding of the application of health information systems in the healthcare environment. Security and confidentiality of information stored in the electronic health record will be discussed, as well as the logistics of monitoring and utilizing the information. This course utilizes specialized educational software for hands-on practice with an electronic health record.
Prerequisite(s): ALH 161 and CST 100
3 lecture hours per week
3 credit hours

**HIT 202 – Coding & Classification II**
This course focuses on the principles of coding and classification systems with an emphasis on the Healthcare Financing Administration’s Common Procedural Coding System (HCPCS) and Current Procedural Terminology (CPT) coding. The review of medical records to identify diagnoses with treatment and/or services performed, and the correct sequencing for optimal reimbursement are also included.
Prerequisite(s): HIT 202
Co-requisite(s): HIT 205
4 lecture hours per week
4 credit hours

**HIT 203 – Coding & Classification III**
This course is an introduction to patient billing and reimbursement systems in ambulatory settings. Topics discussed include billing and claims management issues as well as terminology and principles commonly used in the Managed Care environment. Students will review billing practices and apply the compliance guidelines introduced in the course to prepare health insurance claim forms for various types of insurance plans.
Co-requisite(s): HIT 203
3 lecture hours per week
3 credit hours

**HIT 204 – Healthcare Information in Alternative Systems**
This course focuses on the function and use of the health record in various non-acute care facilities, including long term care, psychiatric, rehabilitation, and cancer settings. In addition, regulatory accreditation and certification standards for documentation and management of patient health records in non-acute environments will be discussed.
Prerequisite(s): HIT 101
45 lecture hours
3 credit hours

**HIT 205 – Reimbursement**
This course is an introduction to patient billing and reimbursement systems in ambulatory settings. Topics discussed include billing and claims management issues as well as terminology and principles commonly used in the Managed Care environment. Students will review billing practices and apply the compliance guidelines introduced in the course to prepare health insurance claim forms for various types of insurance plans.
Co-requisite(s): HIT 203
3 lecture hours per week
3 credit hours

**HIT 206 – Professional Practice**
Under the supervision of a qualified supervisor, students gain professional practice experience in coding and reimbursement. Students will utilize AHIMA VLAB specialized software package to apply theory to practice procedures and complete assignments on functions performed in a health information management department in various healthcare settings, including but not limited to preparation, storage, retrieval, and sharing of health data; analysis and reporting requirements for health record; patient admissions process; coding of health data; CPT coding and assignment; and billing and reimbursement.
Co-requisite(s): HIT 207
2 lecture hours per week
2 credit hours
HIT 207 – Health Information Management
This course uses case studies to introduce students to the management of the patient health record from admission to completion with a focus on structure, content and regulations affecting the health record in various healthcare settings. The functions and responsibilities of the health information management unit will also be discussed. A special software package will be used to apply the theory of health information management to the development, implementation, and management of the electronic health record.
Co-requisite(s): HIT 206
2 lecture hours per week 2 credit hours

HRS • Honors Studies

▲ HRS 103 – Honors Seminar in Cross-Cultural Study
This course will focus on a specific topic each semester and explore it from multiple cultural perspectives. Attention will be paid to the contexts that help inform and shape the views of particular cultures on a given topic and related issues. Topics include: Gender and Sexuality, Peace Studies, Race and Ethnicity in American Culture, Religious Fundamentalisms in the Modern World, U.S. Immigrant Cultures, Contemporary World Film. To promote closer student/faculty collaboration and encourage independent learning, the class is conducted in a seminar format, emphasizing in-depth discussion and higher level thinking skills in an active learning environment.
Prerequisite(s): A minimum GPA of 3.4, 12 credits completed, and permission of the Dean of American Honors
3 lecture hours per week 3 credit hours

▲ HRS 104 – Honors Seminar in Interdisciplinary Study
This course will focus on a specific topic each semester and explore it from the perspective of different academic disciplines, with emphasis placed on the importance of an interdisciplinary approach to the study of a given topic and related issues that do not readily fall under the purview of any single discipline. Topics include: Global Issues, Biomedical Ethics, A Skeptical View of the Paranormal, Death and Dying, The Psychology of Advertising, Film and Society. To promote closer student/faculty collaboration and encourage independent learning, the class is conducted in a seminar format, emphasizing in-depth discussion and higher level thinking skills in an active learning environment.
Prerequisite(s): A minimum GPA of 3.4, 12 credits completed, and permission of the Dean of American Honors
3 lecture hours per week 3 credit hours

HSM • Hotel, Restaurant & Tourism Management

HSM 100 – Introduction to the Hospitality Industry
This course takes a management perspective in introducing students to the organization and structure of hotels, restaurants, clubs, cruise ships, and casino hotels. The emphasis is on business ethics, franchising, management contracts, and areas of management responsibility such as human resources, marketing and sales, and advertising.
3 lecture hours per week 3 credit hours

HSM 110 – Food and Beverage Management
This course gives students a basic understanding of the management process in food and beverage operations. All aspects of food and beverage operations are covered, including organization, marketing, menus, costs and pricing, production, service, safety, and finances.
Prerequisite(s): ENG 096, if required
3 lecture hours per week 3 credit hours

HSM 120 – Managing Front Office Operations
This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel, from the reservations process to check-out and account settlement. The course also examines the various elements of effective front office management, paying particular attention to the planning and evaluation of front office operations and to human resources management. Front office procedures and management are placed within the context of the overall operation of a hotel.
Prerequisite(s): ENG 096, if required
3 lecture hours per week 3 credit hours

HSM 205 – Planning and Control of Food and Beverage Operations
This course presents a systematic approach to food and beverage control systems, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, theft prevention, labor cost control, and computer applications.
Prerequisite(s): ENG 096, if required
3 lecture hours per week 3 credit hours

HSM 220 – Managing Housekeeping Operations
This course presents a systematic approach to managing housekeeping operations in the hospitality industry. Topics include inventory lists, frequency schedules, and performance and productivity standards.
Prerequisite(s): HSM 100 and ENG 101
3 lecture hours per week 3 credit hours

HSM 240 – Hospitality Sales and Marketing
This course is designed to provide students with a solid background in hospitality sales and marketing. The main focus is on practical sales techniques for selling to targeted markets.
Prerequisite(s): ENG 096, if required
3 lecture hours per week 3 credit hours per week

HSM 290 – Co-op Experience in Hospitality Management
This course is a one-semester internship in an approved hospitality organization reinforces classroom and textbook theory with practical hospitality operations experience. This course provides a forum where students can apply the management concepts learned in class and can acquire the hands-on experience necessary to qualify for an entry-level position in the hospitality industry. This course is only open to matriculated students in the hospitality management program. This course should be taken in the student’s last semester of the program.
Prerequisite(s): HSM 205 and HSM 220
135 contact hours 3 credit hours

HUD • American Sign Language & Deaf Studies

HUD 103 – Text and Discourse Analysis for Interpreting
This course will focus on text and discourse analysis of American Sign Language and English in different registers/styles. Processes of text and discourse analysis, semantics and pragmatics, sociolinguistics, structures of ASL and English discourse will be discussed. The course will take an in-depth look at discourse through selected written texts, videotapes and live demonstrations. Lectures and videotapes will be used for skill development in text/discourse analysis and students will practice and apply discourse structures and semantics/pragmatics in ASL and English.
Prerequisite(s): HUD 105, ASL 202, and ASL 20,8 or permission of Division Dean’s office
3 lecture hours per week 3 credit hours

▲ = Fulfills a General Education Requirement
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HUD 108 – Fingerspelling

This course is designed to advance students on the skill development of hand configuration, basic word patterns, rhythm, comprehension of fingerspelled works, phrases, and numbers. Additional focus will be placed on fingerspelled loan signs. Prerequisite(s): ASL 101 and ASL 102 Co-requisite(s): ASL 103 and ASL 104
1 lecture hour per week
1 credit hour

HUD 105 – Interpreting Processes: Theory and Practice

A survey course introducing theories, principles, and practices of interpreting for Deaf persons. The course covers interpreting processes, physical and mental factors, attitudes, ethics, roles of the interpreter, perspectives of the consumers (deaf and hearing), and NIC (RID-NAD) certifications. Prerequisite skills for interpreting will be introduced in this course through instruction for application in interpreting. Students are exposed to basic interpreting situations in a variety of settings through field observations and through use of videotapes. Prerequisite(s): ASL 201 and ASL 205, or permission of Division Dean’s office
3 lecture hours per week
3 credit hours

HUD 109 – Preventive Measures against Cumulative Trauma Disorder in Interpreting

This course will give sign language students and interpreters information and tools that may help prevent and manage cumulative trauma disorders (CTD). The course will cover an orientation and survey of issues related to CTD among sign language interpreters; factors that can lead to symptoms of overuse; preventive and management techniques to help reduce the likelihood of developing overuse symptoms; management techniques for dealing effectively with existing symptoms due to overuse. Prerequisite(s): HUD 105 or permission of Division Dean’s office
1 lecture hour per week
1 credit hour

HUD 110 – Interpreter Role and Ethics

This course will provide exploration of ethical standards and dilemmas in interpretation through discussion, case studies, scenarios and role-plays emphasizing the dynamics of the interpreting team and similarities and differences between advocates, peer counselors, and interpreters. Emphases are on values, ethics, and morality; professional principles, power and responsibility; group dynamics; and decision making. RID-NAD’s Code of Ethics is discussed, practiced and applied in role-plays and scenarios. Prerequisite(s): HUD 105 and HUD 103, or permission of Division Dean office
3 lecture hours per week
3 credit hours

HUD 215 – Advanced Techniques of Interpreting

This course is a classroom practice to provide more in-depth skill and technique development in interpreting and transliterating situations: education and technical, medical, mental health, legal, oral, deaf-blind, etc. Strategies for enhancing professional attitudes and ethical behaviors in interpreters, team interpreting and working with deaf interpreters are discussed. This course is highly interactive with literature and group discussions as part of the institutional approach. Prerequisite(s): HUD 106 or HUD 108
2 lecture hours per week
2 credit hours

HUD 216 – Field Experience in Interpreting

Students enrolled in this course will gain experience interpreting in a variety of settings with Deaf consumers who have diverse linguistic preferences through 90 hours of observation of the interpreting process and hands on experience with supervision. Attendance at seminars and lab activities are required in conjunction with field experience activities. Prerequisite(s): HUD 106, HUD 108, HUD 215, demonstration of proficiency via examination, and permission of the Division Dean’s office
1 lecture hour per week/90 contact hours
3 credit hours

HUS 101 – Community Resources in Human Services

This course provides an introduction of human service needs and how various community service agencies are organized on the local, county, state and federal levels to meet these needs. The course examines how service agencies function in the areas of public health, welfare, mental health, rehabilitation, employment, correction and protection. Existing programs and their operation in the alleviation of personal and social problems are evaluated. In addition, an overview of theory, practice and trends in human services are examined. 3 lecture hours per week
3 credit hours

HUS 201 – Co-op Education Experience in Human Services

This course is a 135-hour field placement of the student as an observer-participant in two or more human service facilities/ agencies. The course provides students with an in-depth study and acquaints them with the services of the agencies and needs of the agencies’ clients. Log reports and seminars are used in conjunction with the field activities. Division approval required. Prerequisite(s): HUS 101
135 contact hours
3 credit hours
INT 101 – Interpreting I

Interpreting I is the first of a two-part sequence that develops the students’ interpreting skills. Bilingual students in any spoken language will learn, practice, and acquire consecutive interpreting skills. These skills include: listening skills, analytical ability, note-taking, short-term memory enhancement, paraphrasing, rapid language switching, and self-monitoring of accuracy. An introduction to sight translation will also be included.

3 lecture hours per week
3 credit hours

INT 102 – Interpreting II

Interpreting II is a continuation of Interpreting I. In this course students will continue to improve on the skills needed to do professional interpreting in spoken languages. Interpreting II will incorporate more difficult passages to interpret and will introduce simultaneous interpreting. Students will focus on the separate skills necessary for the simultaneous interpreting task, such as determining lag time, shadowing, improving comprehension by chunking, focusing on production by modulating delivery, and developing an intuitive ability in their target language. An important aspect of this course will be to teach students techniques they can use to maintain and improve their skills long after they have finished the program.

Prerequisite(s): INT 101
3 lecture hours per week
3 credit hours

INT 105 – The Role of the Interpreter

The Role of the Interpreter will be a practical course on the many aspects of the profession that are not so obvious to the novice. The Interpreters Code of Ethics and Professional Conduct and its implications for impartiality will be stressed. Cultural considerations for interpreting will be discussed, especially the notion of interpreting content and style rather than grammar and vocabulary. The course will also deal with the role of professional organizations and tools that translators and interpreters use in their work. The course requires students to observe professional interpreters in a conference room. This course is open only to students enrolled in the Certificate Program for Interpreting Spoken Languages.

3 lecture hours per week
3 credit hours

ITA • Italian

ITA 101 – Beginning Italian I

This course includes development of the fundamental skills of understanding, speaking, reading, and writing. Listening practice is available. Media are incorporated into the classroom experience. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.

Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

ITA 102 – Beginning Italian II

This course is a continuation of ITA 101. Media are incorporated into the classroom experience. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106.

Prerequisite(s): ITA 101 or two years high school Italian
3 lecture hours per week
3 credit hours

ITA 111 – Intermediate Italian I

This course offers review of fundamental skills of understanding, speaking, reading, and writing. This course is not generally open to native Italian speakers.

Prerequisite(s): ITA 102 or 3 years of high school Italian
3 lecture hours per week
3 credit hours

ITA 112 – Intermediate Italian II

This course is a continuation of ITA 111.

Prerequisite(s): ITA 111
3 lecture hours per week
3 credit hours

LGL • Paralegal Studies

LGL 101 – Introduction to Paralegal Studies

This course introduces the student to the paralegal profession and the proper role of the paralegal in the legal system. Topics include the regulation of paralegals, stress, attorney and paralegal ethics; introduction to the variety of paralegal practice environments and general career trends as well as an overview of the structure of the federal and state court systems and the role of the paralegal in the litigation process. Includes an overview of basic subject areas of law and legal terminology, and introduces the specific skills required of a paralegal in the law office.

3 lecture hours per week
3 credit hours

LGL 110 – Legal Research

This course is designed to familiarize students with procedures for writing correspondence, pleadings, discovery documents, memoranda of law and legal briefs. Students will learn the proper format of these documents, including acceptable forms of citations for various types of legal source materials. Emphasis will be placed on developing a legal writing style that is clear and concise.

3 lecture hours per week
3 credit hours

LGL 111 – Legal Writing

This course introduces the student to the paralegal profession and the proper role of the paralegal in the legal system. Topics include the regulation of paralegals, stress, attorney and paralegal ethics; introduction to the variety of paralegal practice environments and general career trends as well as an overview of the structure of the federal and state court systems and the role of the paralegal in the litigation process. Includes an overview of basic subject areas of law and legal terminology, and introduces the specific skills required of a paralegal in the law office.

3 lecture hours per week
3 credit hours

LGL 120 – Contract Law

This course examines the rules governing formation of contracts and contractual disputes. The student will learn the elements of a valid contract, how to draft a contract, the enforceability of contracts and the judicial process, remedies available when a party fails to perform under a contract and third party interests. An examination of the Uniform Commercial Code and the common law will enable the student to recognize the issues relevant to their case. Students will explore the roles of the paralegal in assisting an attorney in drafting the legal contract and handling a case involving a contract dispute.

3 lecture hours per week
3 credit hours
LGL 210 – Tort Law

This course introduces the student to the concept of torts: the civil wrongs, resulting in injury or harm, perpetrated by one citizen against another. The three general categories of torts, intentional, negligent, and strict liability, will be discussed along with the numerous specific torts including trespass, assault, battery, negligence, products liability, and intentional infliction of emotional distress. This course will examine the proper role and ethical obligations of the paralegal in the field of tort litigation, and will develop the skills paralegals use when assisting attorneys in bringing tort cases to trial.

Prerequisite(s): LGL 101
3 lecture hours per week
3 credit hours

LGL 220 – Litigation I

In this course, students will examine the initial steps of the litigation process including client interviews, pre-litigation investigation and evaluation of the cause of action, drafting complaints and answers. The student will learn the details of filing a lawsuit including the jurisdiction and venue considerations and service of process. The structure of the court system and rules governing litigation are presented and students will explore the workings of a litigation practice and the role played by the paralegal. Emphasis is placed upon forms and documents used in litigation practice, and the ethical guidelines for the paralegal employed in a litigation firm.

3 lecture hours per week
3 credit hours

LGL 221 – Litigation II

This course is a continuation of the examination of the litigation process begun in LGL 220 – Litigation I. In this course, students will learn about the discovery and trial preparation process including the preparation of interrogatories, depositions, document production and inspection requests, and requests for admissions. Through a hands-on approach, students will learn to abstract depositions, organize case files, and prepare a trial notebook. This course will emphasize the role of the paralegal in assisting the attorney in trial preparation.

Prerequisite(s): LGL 220
3 lecture hours per week
3 credit hours

LGL 230 – Family Law

In this course, students will examine issues and procedures in matrimonial and family law matters. Topics include ethical considerations for the attorney and paralegal in family law, premarital agreements, formation and dissolution of marriage, divorce grounds and procedures, spousal and child support, division of property, separation agreements, child custody, legal status of children, adoption, and contemporary issues in the field of family law. Students will become familiar with the forms and documents used in the family law practice.

Prerequisite(s): LGL 101
3 lecture hours per week
3 credit hours

LGL 231 – Criminal Law

This course will familiarize the student with the criminal law process from criminal investigations through appeal. Topics include probable cause, search and seizure, post arrest issues, evidence in criminal cases, the Miranda rule, arraignment and discovery, accessories and attempt, crimes against the person and crimes against property, crimes against the public order, trial procedure, defenses, sentencing and appeal. Emphasis is placed upon the role of the paralegal and ethical issues involved in working on a criminal case.

Prerequisite(s): LGL 101
3 lecture hours per week
3 credit hours

LGL 235 – Wills, Estates & Trusts

This course examines the purpose and need for a will and the legal and procedural issues involved with the drafting, execution, and administration of a will. Students will explore the laws of testamentary succession, will validity requirements, modification and revocation of a will, probate administration, and types of trusts. Tax considerations in the administration of estates and ethical principles relevant to paralegals will also be discussed.

Prerequisite(s): LGL 101
3 lecture hours per week
3 credit hours

LGL 240 – Business Organizations

In this course, the student will study different forms of business organizations and considerations in choosing a business entity. Topics include the formation and organization of sole proprietorships, partnerships, limited liability companies, and corporations and the tax considerations associated with each of these entities. Students will examine the documentation required to establish and maintain the various types of business organizations and will be instructed in the proper filing procedures.

Prerequisite(s): LGL 101
3 lecture hours per week
3 credit hours

LGL 250 – Bankruptcy Law

This course is an overview of bankruptcy law and procedure to prepare paralegals to assist attorneys representing debtors and creditors. It will cover commencement of a case, preparation of petitions and schedules, operating and liquidating procedures, adversary matters and litigation in bankruptcy court, and debtors’ and creditors’ rights and obligations. Forms utilized in bankruptcy court will be stressed. The course reviews the current Federal bankruptcy code including recent amendments.

Prerequisite(s): LGL 101
3 lecture hours per week
3 credit hours
LIS 105 – Methods in Library Research

This course will explore a systematic approach to library resources in the technological environment. The course is designed to meet the individual research needs of today’s student. The course covers the primary tools of a modern academic library: the catalog, the reference collection, online databases, and internet searching, while developing the conceptual knowledge necessary for effective searching, evaluation, selection, and use of information. Methods of research strategy are taught in conjunction with other course-assigned projects. This is a technology-enriched class with many online components.

5 lecture hours per week
5 institutional credit hours

LIS 260 – Employment Law

This course is an overview of the legal framework governing employer-employee relations, employment discrimination, employment-related common law torts and certain federal and state statutory schemes governing leave, unemployment, benefits and workplace injuries.

Prerequisite(s): LIS 101
3 lecture hours per week
3 credit hours

LGL 270 – Immigration Law

This course is an overview of immigration law and procedure in the United States. Topics include worker and student visas, family visa petitions, issues in illegal immigration, refugee and asylum law, immigration court practice, and appeals. The course also covers citizenship and the requirements for an immigrant to become a citizen. The preparation of forms utilized in immigration practice will be stressed.

Prerequisite(s): LGL 110
3 lecture hours per week
3 credit hours

LGL 290 – Paralegal Internship

Students gain hands-on work experience in a legal environment while working at least a total of 150 hours during the semester. The goal of the experience is to bridge the gap between classroom learning and the realities of the working world. Participants may be placed in private law offices, corporate legal departments, public agencies, legal services agencies, or other organizations. Students meet with the Coordinator of Paralegal Studies at the beginning of the semester for an orientation meeting and regularly thereafter to discuss internship goals and their progress. This course is an elective in the Paralegal Studies curriculum. Prerequisite(s): LGL 101, LGL 111, and approval of the Paralegal Coordinator.
150 internship hours
3 credit hours

MAT • Mathematics

MAT 017 – Introduction to Elementary Algebra I

This course is accelerated to support completion of developmental requirements in less time than the traditional sequence. Topics include arithmetic operations, fractions, decimals, percentages, factors, proportions, integers, algebraic expressions, solving basic linear equations and inequalities, finding equations of lines, and graphing linear equations. Applications through problem-solving are integrated in all course topics. Technology is used to facilitate some independent, self-paced instruction.

Prerequisite(s): Satisfactory performance on Accuplacer
5 lecture hours per week
5 institutional credit hours

MAT 019 – Introduction to Elementary Algebra I for Advanced Math Students

This course is accelerated to support completion of developmental requirements. Topics include arithmetic operations, fractions, decimals, percentages, factors, proportions, integers, algebraic expressions, solving basic linear and inequalities, finding equations of lines, and graphing linear equations. Applications through problem-solving are integrated in all course topics. Technology is used to facilitate some independent, self-paced instruction.

Prerequisite(s): Satisfactory performance on Accuplacer
5 lecture hours per week
5 institutional credit hours

MAT 020 – Elementary Algebra

This course is designed to support completion of developmental mathematics requirements for students who need MAT 119 as part of their curriculum. Topics include arithmetic operations, fractions, decimals, percentages, factors, proportions, integers, algebraic expressions, solving basic linear equations and inequalities, finding the equation of a line, graphing linear equations, systems of linear equations, exponential, scientific notation, polynomials, factoring of trinomials, radicals, rational expressions and quadratics. Applications through problem solving are integrated in all course topics.

6 lecture hours per week
6 credit hours

MAT 021 – Introduction to Elementary Algebra II for Advanced Math Students

This course is a continuation of MAT 019 to support accelerated completion of developmental requirements for STEM majors and those following a similar curriculum path. Topics include systems of linear equations, exponents, scientific notation, polynomials, factoring of trinomials, radicals, rational expressions, quadratics and applications in verbal problems. Applications through problem-solving are integrated into all course topics. Technology is used to facilitate independent, self-paced instruction.

Prerequisite(s): MAT 019
4 lecture hours per week
4 institutional credit hours

MAT 022 – Introduction to Algebra

This course is for students whose College Basic Skills Test score indicates the need for preparatory work in algebra. The course includes solving equations, polynomials, factoring, rational equations, radical equations, systems of linear equations, graphing linear equations and quadratic equations.

Prerequisite(s): Required score on Algebra Placement Test
4 lecture hours per week
4 institutional credit hours

MAT 113 – Math Applications

This course is intended for students in the Associate in Applied Science degree Programs. Topics covered include algebra, linear equations, ratios, proportions, percents, word problems, critical thinking skills, sales taxes, property taxes, weekly wages, payroll deductions, depreciation, checking accounts, trade and cash discounts, markups, markdowns, and simple interest.

Prerequisite(s): MAT 017, if required, or required score on Algebra Placement Test
3 lecture hours per week
3 credit hours

NOTE: THIS COURSE FULFILLS A GENERAL EDUCATION REQUIREMENT FOR A.A.S. DEGREE CANDIDATES ONLY.
MAT 117 – An Introduction to Mathematical Ideas
This course is for students enrolled in Liberal Arts and General Education Programs. The course is not recommended for students who have completed Algebra II or higher.
Prerequisite(s): ENG 097, if required, and MAT 017 or MAT 022, if required
4 lecture hours per week
3 credit hours

MAT 119 – Algebra
This course is for students who have mastered basic algebra and need a deeper understanding of algebra before progressing to other credit mathematics courses. Topics include solving linear and quadratic equations and inequalities, absolute value equations and inequalities, graphs of linear and quadratic equations, equations of lines, systems of equations, introduction to functions, quadratic functions, polynomials functions, rational functions, radical functions, rational exponents and applications.
Prerequisite(s): ENG 097, if required, and MAT 019 or MAT 022, if required
4 lecture hours per week
4 credit hours

MAT 125 – Survey of Special Topics in Mathematics
This course is designed for liberal arts majors. Its objective is to give students an appreciation of the beauty and utility of mathematics, and to provide a better idea of what mathematics is and where it can be applied. Topics include Set Theory, Logic, Geometry, Operations Research & Game Theory, and Voting & Social Choice.
Prerequisite(s): ENG 097, if required, and MAT 017 or MAT 022, if required
4 lecture hours per week
4 credit hours

MAT 127 – Elementary Statistics
This course is an elementary course in descriptive statistics and statistical inference. Topics include: measures of central tendency and dispersion, sampling and probability distributions, including binomial, normal, and others. Practical problems involving correlation, linear regression, confidence intervals, and hypothesis testing are included.
Prerequisite(s): ENG 097, if required, and MAT 017 or MAT 022, if required
4 lecture hours per week
4 credit hours

MAT 143 – Elementary Mathematical Analysis I
This course provides an introduction to the concepts and techniques needed to proceed to more advanced mathematics and science courses, such as calculus. Topics include rational exponents, circles, functions and their properties, complex numbers, solving quadratic equations, graphs of quadratic functions, polynomial functions and their graphs, functions and their graphs, synthetic division, inverse functions, exponential and logarithmic functions with applications.
Prerequisite(s): ENG 097, if required, and MAT 119 or satisfactory performance on the College Level Mathematics Test
4 lecture hours per week
4 credit hours

MAT 144 – Elementary Mathematical Analysis II
This course is a continuation of Elementary Mathematical Analysis I, specifically intended for students continuing on to Calculus or studying Engineering Technology. Topics include right triangles and their applications, linear and angular velocity, graphing trigonometric functions, inverse trigonometric functions, Sum, Difference, Double-angle, and Half-angle formulas, the Law of Sines, the Law of Cosines, solving trigonometric equations, polar coordinates, polar equations, polar graphs, DeMoivre’s Theorem, Vectors, and Conics.
Prerequisite(s): ENG 097, if required, and MAT 143 or a satisfactory score on the College Level Mathematics Test
4 lecture hours per week
4 credit hours

MAT 146 – Brief Calculus with Applications
This course is an elementary course in the application of the fundamentals of calculus to the management, social, and life sciences. Topics include limits, continuity, differentiation, maxima, minima, integration of elementary functions, and applications.
Prerequisite(s): ENG 097, if required, and MAT 143 or satisfactory score on the College Level Mathematics Test
3 lecture hours per week
3 credit hours

MAT 155 – Elementary Mathematical Analysis
This course is an accelerated one semester Pre-Calculus course designed for students with sufficient mathematics background but in need of a review of material prior to taking Calculus. This course covers the advanced mathematics needed for Physics, Engineering, and the sciences. Topics include functions and their properties, graphs of quadratic functions, polynomial functions and their graphs, rational functions and their graphs, inverse functions, exponential and logarithmic functions with applications, right triangles and their applications, linear and angular velocity, graphing trigonometric functions, inverse trigonometric functions, Sum, Difference, Double-angle, and Half-angle formulas, the Law of Sines, the Law of Cosines, solving trigonometric equations, polar coordinates, polar equations, polar graphs, DeMoivre’s Theorem, Vectors, and Conics.
Prerequisite(s): ENG 097, if required, and satisfactory score on the College Level Mathematics Test and Division approval
5 lecture hours per week
5 credit hours

MAT 171 – Unified Calculus I
This course is a college level study in Calculus. Topics include: analytic geometry; limits and continuity; differentiation and integration of algebraic and transcendental functions; extrema; definite and indefinite integrals; applications to geometric and physical problems.
Prerequisite(s): ENG 097, if required, MAT 144 or MAT 155 or a satisfactory score on the College Level Mathematics Test
4 lecture hours per week
4 credit hours

MAT 172 – Unified Calculus II
This course is a continuation of MAT 171 particularly appropriate for students continuing onto Calculus III or studying Engineering. Topics include algebraic and transcendental functions, techniques of integration, area, volume, applications to the physical, biological, and managerial sciences, infinite series, conic sections, and parametric equations.
Prerequisite(s): ENG 097, if required, MAT 171 or satisfactory score on the College Level Mathematics Test
4 lecture hours per week
4 credit hours
▲ MAT 246 – Business Statistical Analysis
This course provides an application of statistical methods to business. Topics include an introduction to descriptive and inferential statistics, including measures of central tendency and dispersion, probability theory, sampling, estimations, hypothesis testing, analysis of frequencies, linear regression and correlation, time-series analysis and computer applications. This course is recommended as the foundation course in quantitative analysis as generally prescribed by AACSB member colleges for business administration students. Prerequisite(s): ENG 097, if required, and MAT 143
4 lecture hours per week
4 credit hours

MAT 248 – Probability and Statistics
This course introduces the essentials of probability theory and elementary statistics. Topics include an introduction to descriptive and inferential statistics; sample space and events, probability axioms, and counting techniques; conditional probability and independence, and Bayes’ Theorem; discrete random variables, distribution functions and moments, and Binomial and Poisson Distributions; continuous random variables, densities and moments, normal, gamma, and exponential distributions; unions; the Central Limit Theorem; confidence intervals; hypothesis testing and p-values; regression and correlation. Prerequisite(s): MAT 171
3 lecture hours
3 credit hours

▲ MAT 265 – Linear Algebra
This course will develop advanced mathematical skills appropriate for students pursuing STEM studies. Topics include linear algebra over the real number system, vector spaces, linear transformations, matrices, systems of linear equations, determinants, the Gram-Schmidt Orthogonalization Process, eigenvectors and eigenvalues. Prerequisite(s): ENG 097, if required, and MAT 172
3 lecture hours per week
3 credit hours

MAT 266 – Survey of Modern Mathematics
This course provides a transition to higher mathematics and introduces the basic methods of proofs. Topics include number theory, elementary symbolic logic, set theory, basic methods of mathematical proofs, relations and functions, as well as the theory of mathematical thinking and writing. Prerequisite(s): ENG 097, if required, and MAT 171
Co-requisite(s): MAT 172
3 lecture hours per week
3 credit hours

▲ MAT 267 – Discrete Mathematics
This course will develop advanced mathematical skills appropriate for students pursuing STEM studies such as Engineering, Science, Computer Science, and Mathematics. Topics include sets, numbers, algorithms, logic, computer arithmetic, applied modern algebra, combinations, recursion principles, graph theory, trees, discrete probability, and digraphs. Prerequisite(s): ENG 097, if required, and MAT 143
3 lecture hours per week
3 credit hours

▲ MAT 271 – Unified Calculus III
This course provides additional topics in calculus and analytic geometry. Topics include indeterminate forms, vector functions and calculus, functions of several variables, multiple integrals, partial derivatives, directional derivatives, divergence, curl, line integrals, and Green’s Theorem. Prerequisite(s): ENG 097, if required, and MAT 172
4 lecture hours per week
4 credit hours

▲ MAT 272 – Differential Equations
This course will develop advanced mathematical skills for students pursuing STEM studies. Topics include fundamental theorems on existence and uniqueness for solutions of ordinary differential equations; solution and applications of equations of the first order and first degree; linear equations of higher order; Laplace transforms; solution by series. Prerequisite(s): ENG 097, if required, and MAT 271
4 lecture hours per week
4 credit hours

MET • Mechanical Engineering Technology

MET 104 – Engineering Drawings
This course is a study of the major elements of the engineering drawing. Topics include Multiview (2-dimensional) sections and pictorial views, dimensioning practices, ANSI standard limits and fits, surface finishes and fasteners. Measuring instruments will be used to confirm sizes and tolerances. Geometric dimensioning and tolerances (GD&T) are covered with attention to tolerances of form, orientation, location, runout and position. Also included are applications of symbols, datums, material condition modifiers, bonus tolerances, and virtual conditions. Prerequisite(s): MET 109 or approval of Division Co-requisite(s): METL 104
3 lecture hours and 1 laboratory hour per week
3 credit hours

MET 106 – Engineering Materials and Processes
This course is a study of the basic materials used in engineering: their properties, manufacture, selection, and uses. Some materials will be studied and evaluated in laboratory experiments and demonstrations. Materials working machines and techniques (e.g., lathes, welding) are covered. Co-requisite(s): METL 106
2 lecture hours and 3 laboratory hours per week
3 credit hours

MET 109 – Computer-Aided Drafting
This course is a project based introduction to 2-dimensional, computer-aided drafting using AutoCAD software. Topics include drawing entities, display control, editing techniques, layers and linetypes, hatching, dimensioning, scaling, library blocks, and attributes. Project drawings such as detailed machine parts, surveyed plot plans, and architectural floor plans will require application of model and paper space, templates, viewports and external references. Co-requisite(s): METL 109
2 lecture hours and 3 laboratory hours per week
3 credit hours

MET 112 – Mechanics-Statics
This course is a study of the basic principles of static equilibrium of forces, including the use of free-body diagrams, the location of centroids, and the calculation of moment of inertia. Practical problems involving simple machines, trusses, and frames are analyzed. Calculations use units from both the English Gravitational System and the International System (Metric). Prerequisite(s): MAT 143 or MAT 155
3 lecture hours per week
3 credit hours

MET 219 – CAD/CAM
This course introduces Computer-Aided Manufacturing using Mastercam software. The basics of Numerical Control (NC) programming are covered including G and M codes, absolute and incremental positioning and canned cycles. Part geometry is created and edited using Mastercam software. Job setups are prepared, tool path is specified and a tool library is created. Part machining is verified graphically and NC code is post processed and downloaded to CNC machine tools to produce actual parts. Prerequisite(s): MET 106 and MET 109 Co-requisite(s): METL 219
2 lecture hours and 3 laboratory hours per week
3 credit hours

▲ = Fulfills a General Education Requirement
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MTR • Meteorology

METL 101 – Introduction to Meteorology
This course provides a survey of the fundamentals of meteorology, including the history, basic physical laws, local and global processes, instrumentaion used, and general forecasting technology. Current or recent significant weather events will be included in lectures and labs. Through these elements, students will develop a greater understanding and appreciation of the behavior of the atmosphere.
Prerequisite(s): ENG 096, if required
Co-requisite(s): MTRL 101
3 lecture and 3 laboratory hours per week
4 credit hours

MTR 101 – Introduction to Meteorology Laboratory
This is a co-requisite laboratory course for MTR 101.
Co-requisite(s): MTR 101.

NTR • Nursing, Trinitas

NURE 130 – Nursing Trends and Concepts
This course introduces the student to the profession of nursing, its evolution, and current trends and issues. The role of the nurse within the health care delivery system is incorporated throughout the course. Elements of normal nutrition are introduced. Nursing process is presented as the method of formulating decisions and providing care in nurse-client interactions. The relationship of critical thinking to clinical judgment is explored. An overview of nursing theories and health assessment is presented. A review of basic math principles is conducted with later emphasis on dosage calculations for medication administration. Self-study chapters of medical terminology are also introduced throughout the course. The theory base provided in NURE 130 will be built upon and applied in subsequent nursing courses.
Prerequisite(s): Completion of all developmental courses and GPA of 2.5
Co-requisite(s): BIO 105, CHE 114, ENG 101
15 week course
4 hours theory per week
4 credit hours

NURE 131 – Nursing I
This course is an introductory course to the profession of nursing, including the history, basic physical laws, local and global processes, instrumentation used, and general forecasting technology. Current or recent significant weather events will be included in lectures and labs. Through these elements, students will develop a greater understanding and appreciation of the behavior of the atmosphere.
Prerequisite(s): ENG 096, if required
Co-requisite(s): MTRL 101
3 lecture and 3 laboratory hours per week
4 credit hours

MTRL 106 – Engineering Materials and Processes Laboratory
This is a co-requisite laboratory course for METL 106.
Co-requisite(s): METL 106

Co-requisite(s): METL 109

METL 219 – CAD/CAM Laboratory
This is a co-requisite laboratory course for METL 219.
Co-requisite(s): METL 219

NURE 132 – Bridge-to-Professional Nursing Core Concepts
This course builds upon the foundation of NURE 130/NURE 131. It explores the roles of the professional nurse as a member of the health care team utilizing critical thinking and problem solving skills with expansion of health assessment techniques while caring for adults experiencing acute/chronic disruptions of existing patterns of normalcy. The student will be utilizing the nursing process, developing and refining clinical skills as well as establishing priorities in predictable health care situations. Learning experiences are provided in the classroom, Learning/Simulation Center and in multicultural adult medical/surgical facilities and the community.
Prerequisite(s): NURE 131, NREL 131, BIO 106, PSY 101, and GPA 2.5
Co-requisites BIO 108, PSY 204, NREL 132.
15 week course. 4 hours theory, 12 hours clinical per week 8 credit hours

NURE 211 – Bridge-to-Professional Nursing Core Concepts
This course introduces the LPN-to-RN student to the framework and concepts of the Trinitas School of Nursing program. Role socialization, communication principles, nursing process, concept care mapping, teaching/learning principles, critical thinking, legal-ethical standards/issues, and the role of cultural competence in contemporary nursing will be explored. Pharmacological concepts will be discussed and a review of medication administration with emphasis on drug/IV calculations will be conducted and regularly reinforced throughout the course.
Prerequisite(s): Proof of current LPN license, BIO 105, BIO 106, BIO 108; CHE 114; ENG 101, ENG 102; PSY 101, PSY 204; SOC 101; 6 credits Gen Ed Humanities Electives, and GPA 2.5
Co-requisite NURE 212, NREL 212. 15 week course
3 theory hours per week
3 credit hours
NURE 212 – Health and Physical Assessment

This course builds upon the foundation of NURE 130, NURE 131, and NURE 132. It introduces the student to holistic health assessment and physical examination. The course aims to develop the student’s abilities in gathering data to determine client’s health status, practices and goals as influenced by his/her own culture. Starting with assessment of normal health parameters, the student will learn to differentiate between what is within and out of acceptable limits. Within the context of care of the perioperative or gerontological client, the student will learn and use physical assessment techniques of inspection, palpation, percussion and auscultation as well as other forms of data collection, such as, client interview, chart review, and analysis of laboratory and diagnostic results. The roles of the RN and the LPN in physical assessment/data collection will be discussed. The student will practice physical assessment skills and participate in laboratory experiences using scenarios involving a patient in the Learning/Simulation Center and the computer laboratory.

Prerequisite(s): Same as NURE 211 and GPA of 2.5
Co-requisite(s): NURE 211, NREL 212, 15 week course
2 hours theory, 6 hours clinical per week
4 credits hours

NURE 232 – Nursing IV

This course builds upon the foundation of NURE 130, NURE 131, NURE 132, & NURE 231. It explores the nurse’s role in caring for adult clients experiencing complex medical-surgical health alterations that are potentially life threatening and adult clients experiencing acute and chronic psychiatric mental health alterations. Learning experiences are provided in the classroom, Learning/Simulation Center and in multicultural adult medical/surgical and psychiatric/mental health facilities. 15 week course.

Prerequisite(s): NURE 231, NREL 231, All liberal arts and science courses listed in the curriculum. GPA 2.5
Co-requisite(s): NREL 232, 6 credits General Education Humanities Electives
5 hours theory, 15 hours clinical per week
10 credits hours

NURE 250 – Nursing Care of the Client with a Medical Surgical Health Deviation

This course builds upon the foundation of NURE 211, and NURE 212. Within the context of the nursing process, the student will be refining and developing clinical skills while caring for clients experiencing acute/chronic disruptions in normalcy with emphasis on critical thinking, physical assessment and teaching/learning principles. Clinical experiences are provided in a variety of structured, multi cultural acute/chronic health care settings. Other learning experiences will occur in the classroom with assigned activities in the computer laboratory. Clinical experiences are provided in a variety of structured, multi cultural acute/chronic health care settings. Other learning experiences will occur in the classroom with assigned activities in the Learning/Simulation Center and the computer lab. Clinical experiences are provided in a variety of structured, multi cultural acute/chronic health care settings. Other learning experiences will occur in the classroom, with assigned activities in the Learning/Simulation Center, and the computer laboratory.

Prerequisite(s): NURE 211, NREL 212, and GPA 2.5. 15 week course
Co-requisite(s): NREL 210 3 hours theory, 9 clinical hours per week
6 credits hours

NURE 260 – Nursing Care of Children and their Families

This course builds upon the foundation of NURE 250 and LPN education. It explores the role of the professional registered nurse as a member of a multidisciplinary team in caring for children and the childbearing family. Emphasis is placed on health education and community resources in relation to women’s health and the childbearing cycle. Deviations from the normal physiologic and psychosocial development are explored. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking and clinical skills. Clinical experiences are provided in a variety of structured, multi cultural health care settings. Other learning experiences will occur in the classroom, with assigned activities in the Learning/Simulation Center and the computer laboratory.

Prerequisite(s): Completion of NURE 260, NURE 270, NREL 260, NREL 270, and GPA 2.5
Co-requisite(s): NREL 270
7-week course. 3 hours theory, 9 hours clinical per week
3 credits hours

NURE 270 – Nursing Care of Women and the Childbearing Family

This course builds upon the foundation of NURE 250 and LPN education. It explores the role of the professional registered nurse as a member of a multidisciplinary team in caring for women and the childbearing family. Emphasis is placed on health education and community resources in relation to women’s health and the childbearing cycle. Deviations from the normal physiologic and psychosocial development are explored. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking and clinical skills. Clinical experiences are provided in a variety of structured, multi cultural health care settings. Other learning experiences will occur in the classroom, with assigned activities in the Learning/Simulation Center and the computer laboratory.

Prerequisite(s): NURE 250, NREL 250, GPA 2.5
Co-requisite(s): NREL 270
7-week course. 3 hours theory, 9 hours clinical per week
3 credits hours
NREL 290 – Nursing Care of the Client With Complex Multi-System Medical/Surgical Health Deviation
NREL 290 builds upon the foundations of NURE 260, NURE 270, NURE 280 and LPN education. It explores the role of the professional registered nurse as a member of a multi-disciplinary team in caring for clients with complex multi-system medical/surgical health deviations. Emphasis is placed on organizing, prioritizing, and evaluating nursing care for clients by assisting them with self-care deficits. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking in clinical health care settings. Other learning experiences will occur in the classroom, with assigned activities in the Learning/Simulation Center, and the computer lab.
Prerequisite(s): NURE 280, NREL 280 and GPA of 2.5
Co-requisite(s): NREL 290
7 week course, 3 hours theory, 9 hours clinical per week
3 credit hours

NREL 291 – Leadership and Management Seminar
NREL 291 builds upon the foundation of NURE 211, NURE 212, NURE 250, NURE 260, NURE 270, NURE 280, and LPN education. It is an introduction to the theory and practice of nursing leadership and management. Emphasis is placed on thinking critically, communicating effectively, handling conflict, delegating successfully, building teams, controlling resources, and improving quality to act in the role of a highly successful nurse. The role transition from a licensed practical nurse to a registered nurse will also be explored.
Prerequisite(s): RN Generic Track – NURE 231, NREL 231, LPN-RN Track – NURE 260, NREL 260, NURE 270, NREL 270, and GPA 2.5
15 week course, 1 hour per week
1 credit hour
Transportation – Students are responsible for providing their own transportation to school and to all clinical assignments. Clinical agencies utilized are located in but may not be limited to Union, Essex, Somerset, and Middlesex counties.

NREL 133 – Nursing I Laboratory
This is a co-requisite laboratory course for NURE 211 and NURE 212.
Co-requisite(s): NURE 211, NURE 212

NREL 231 – Nursing III Laboratory
This is a co-requisite laboratory course for NURE 231.
Co-requisite(s): NURE 231

NREL 232 – Nursing IV Laboratory
This is a co-requisite laboratory course for NURE 232.
Co-requisite(s): NURE 232

NREL 250 – Nursing Care of the Client with a Medical Surgical Health Deviation Laboratory
This is a co-requisite laboratory course for NURE 250.
Co-requisite(s): NURE 250

NREL 260 – Nursing Care of Children and their Families Lab
This is a co-requisite laboratory course for NURE 260.
Co-requisite(s): NURE 260

NREL 270 – Nursing Care of Women and the Childbearing Family Lab
This is a co-requisite laboratory course for NURE 270.
Co-requisite(s): NURE 270

NREL 280 – Nursing Care of the Client with Mental Illness
This is a co-requisite laboratory course for NURE 280.
Co-requisite(s): NURE 280

NREL 290 – Nursing Care of the Client with Complex Multi-System Medical/Surgical Health Deviation Lab
This is a co-requisite laboratory course for NURE 290.
Co-requisite(s): NURE 290

NURE 132 – Nursing II Laboratory
This is a co-requisite laboratory course for NURE 211 and NURE 212.
Co-requisite(s): NURE 211 and NURE 212

NREL 212 – Health and Physical Assessment Lab
This is a co-requisite laboratory course for NURE 211 and NURE 212.
Co-requisite(s): NURE 211 and NURE 212

NREL 131 – Nursing I Laboratory
This is a co-requisite laboratory course for NURE 131.
Co-requisite(s): NURE 131

NREL 132 – Nursing II Laboratory
This is a co-requisite laboratory course for NURE 132.
Co-requisite(s): NURE 132

NURE 290 – Leadership and Management Seminar
NURE 290 builds upon the foundations of NURE 260, NURE 270, NURE 280 and LPN education. It explores the role of the professional registered nurse as a member of a multi-disciplinary team in caring for clients with complex multi-system medical/surgical health deviations. Emphasis is placed on organizing, prioritizing, and evaluating nursing care for clients by assisting them with self-care deficits. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking in clinical health care settings. Other learning experiences will occur in the classroom, with assigned activities in the Learning/Simulation Center, and the computer lab.
Prerequisite(s): NURE 280, NREL 280 and GPA of 2.5
Co-requisite(s): NREL 290
7 week course, 3 hours theory, 9 hours clinical per week
3 credit hours

NURM 100 – Mathematics for Nursing
This course is primarily designed to prepare students with the definitive mathematical concepts necessary to ensure safe administration of medications. The metric and household systems are reviewed and applied. In addition to mathematical concepts, correlation of pharmacological theory to nursing practice will be emphasized. Blended online course with 4 classroom meetings.
Co-requisite(s): BIO 105, CHE 114, ENG 101, NURM 119
1 credit hour

NURE 291 – Leadership and Management Seminar
NURE 291 builds upon the foundation of NURE 211, NURE 212, NURE 250, NURE 260, NURE 270, NURE 280 and LPN education. It is an introduction to the theory and practice of nursing leadership and management. Emphasis is placed on thinking critically, communicating effectively, handling conflict, delegating successfully, building teams, controlling resources, and improving quality to act in the role of a highly successful nurse. The role transition from a licensed practical nurse to a registered nurse will also be explored.
Prerequisite(s): RN Generic Track – NURE 231, NREL 231, LPN-RN Track – NURE 260, NREL 260, NURE 270, NREL 270, and GPA 2.5
15 week course, 1 hour per week
1 credit hour
Transportation – Students are responsible for providing their own transportation to school and to all clinical assignments. Clinical agencies utilized are located in but may not be limited to Union, Essex, Somerset, and Middlesex counties.

NURM 119 – Introduction to Nursing
(To be taken in the semester immediately prior to NURM 121) This course is designed to provide the student nurse with the knowledge necessary for registered nurse practice. The role of the accountable, responsible registered nurse is explored through such topics as the profession of nursing, its historical perspectives and Orem’s Self Care Deficit Theory. Emphasis is placed on the nursing process, evidence-based practice and the critical thinking necessary for practice. Integrated throughout the course are concepts and issues that relate to nursing practice: the nurse patient relationship, effective communication, self-care and wellness, culture, teaching and learning, nutrition and current ethical and legal considerations. The theory base provided for in this course will be built upon and applied in subsequent nursing courses.
Co-requisite(s): NURM 100, BIO 105, CHE 114, ENG 101; GPA 2.0
3 lecture hours
3 credit hours

NURM 120 – LPN Transition Course
NURM 120 serves as a bridge course designed to facilitate the transition of the student from the role of the LPN to the role of a student preparing for RN practice. The course will introduce the student to the philosophy, objectives, and conceptual framework of the JFK Muhlenberg Harold B. and Dorothy A. Snyder Schools of Nursing and Medical Imaging program. The nursing process will be introduced as it relates to evidence-based decision making when planning care for adults with selected basic care need/self-care deficits. Nursing theory, nutrition, pharmacology, psychosocial, ethical and legal concepts related to nursing practice will be examined. The role of the registered nurse as a member of the nursing and health teams will be explored. Laboratory experiences will be provided in adult medical-surgical clinical and classroom facilities. Note: Course is normally offered in a 4-week format.
Prerequisite(s): Current LPN license, BIO 105, BIO 106, BIO 108, PSY 101, PSY 204, ENG 101, ENG 102, CHE 114, and SOC 101. 11.2 lecture and 11.2 laboratory hours per week 4 credit hours
Co-requisite(s): NRM 120
2 lecture and 11.2 laboratory hours per week
4 credit hours
NURM 121 – Nursing I

This course is designed to establish the foundation of knowledge, attitude and perceptual motor skills necessary for registered nurse practice. The role of the accountable, responsible registered nurse as it relates to the delivery of evidence-based care to patients experiencing actual/potential, commonly occurring simple basic need/health deviations is explored. Within the context of the nursing process, the assessment phase is stressed. The student nurse gains experiences in the systematic data collection through the use of the nursing history and physical examination. Emphasis is placed on the application of beginning effective communication, self-care and wellness. Current legal, ethical and social problems and teaching and learning principles are elaborated on. Laboratory experiences are provided in the classroom laboratory setting as well as medical-surgical units, long term care facilities, and any other clinical sites to meet the course objectives. Prerequisite(s): NURM 121 and its co-requisites.

Co-requisite(s): NURM 121, BIO 106, PSY 101
4 lecture hours and 12 laboratory hours per week
8 credit hours

NURM 141 – Accelerated Nursing – Spring

NURM 141 is a comprehensive course designed to establish a sound foundation of knowledge, attitudes and perceptual motor skills necessary for accountable, registered nurse practice. The role of the accountable, responsible registered nurse as it relates to the delivery of evidence-based care to patients experiencing actual/potential, commonly occurring simple basic need/health deviation is explored. Theoretical nursing concepts and related skills with emphasis on self-care, developmental requisites and basic needs of Man form the organizational framework of the course. The nursing process, ethical/legal/historical constructs, communication techniques, teaching-learning principles and nutritional, pathophysiologic, pharmacological and psycho-social concepts are applied to meeting the nursing needs of patients experiencing commonly occurring health problems. Prerequisite(s): BIO 105, BIO 106, BIO 108, CHE 114, NURM 100, PSY 101, PSY 204, ENG 101, ENG 102, SOC 101, 2 Humanities electives
Co-requisite: NRML 141; GPA 2.0
7 lecture hours and 18 laboratory hours per week
13 credit hours

NURM 222 – Nursing IV

This course emphasizes the role of the accountable, responsible registered nurse as it relates to the delivery of evidence-based care to patients experiencing actual/potential, commonly occurring multiple complex deviations. Within the context of the nursing process, the evaluation phase is stressed. The student nurse gains experience in organizing, prioritizing and evaluating care for a small group of patients in the clinical setting. Emphasis is placed on the application of increasing therapeutic communication skills, management and leadership skills, current legal, ethical and social problems and teaching/learning principles which assist the patient in overcoming self-care deficits. Laboratory experiences are provided in the classroom laboratory setting as well as medical-surgical and critical care units, community agencies and any other clinical sites to meet the course objectives. Prerequisite(s): NRML 221
Co-requisite(s): NRML 242, 2 Humanities electives
4.5 lecture hours and 13.5 laboratory hours per week
9 credit hours

NURM 241 – Accelerated Nursing – Summer

NURM 241 explores the role of the accountable, registered nurse as it relates to the delivery of evidence-based care to the childbearing and childrearing family and patients experiencing commonly occurring psychological and psycho-social deviations. Ethical/legal, nutritional, pharmacological, developmental, psychological and sociological concepts related to meeting the nursing needs of patients are integrated. Emphasis is placed on teaching/learning principles and the development of therapeutic communication techniques within the nurse-patient relationship. Laboratory experiences are provided in parent/child inpatient and community settings and also at behavioral and adult health care facilities. This is a condensed summer course. Prerequisite(s): NURM 141
Co-requisite(s): NRML 241
8.2 lecture hours and 20.5 laboratory hours per week
11 credit hours
NURM 242 – Accelerated Nursing – Fall
NURM 242 explores the role of the accountable, responsible registered nurse as it relates to the delivery of evidence-based care to patients experiencing actual/potential, commonly occurring, multiple complex health deviations. Within the context of the nursing process, the nursing student gains experience in organizing, prioritizing and evaluating care for small groups of patients by assisting them to overcome those deficits which interfere with self-care. Nutritional, pharmacological, psychological and sociological needs of the patient as well as ethical/legal issues related to the care of chronically ill patients are discussed. Emphasis is also placed on increasing communication skills and implementing teaching-learning principles. Experiences are provided in a variety of structured health care settings such as the acute care units and medical-surgical units.
Prerequisite(s): NURM 241
Co-requisite(s): NURM 242
7 lecture hours and 18 laboratory hours per week
13 credit hours

NURM 241 – Accelerated Nursing Laboratory – Summer
This is a co-requisite laboratory course for NURM 241.
Co-requisite(s): NURM 242

NURM 242 – Accelerated Nursing Laboratory – Fall
This is a co-requisite laboratory course for NURM 242.
Co-requisite(s): NURM 242

PED 101 – Concepts of Adult Fitness
Through a series of lectures and practicums, this course explores various aspects of health and physical fitness. In addition to mastering selected concepts concerning health and physical fitness, each student develops, through self-testing practicums, his/her own physical fitness profile and program.
2 lecture hours per week
2 credit hours

PED 107 – Decisions for Wellness
BIO 107 without the laboratory component. This course will not fulfill a college laboratory science requirement. Division approval required.
3 lecture hours per week
3 credit hours

PED 110 – Beginning Golf
Beginning golf covers the basic techniques of the game of golf. Also covered in the course are the history of the game, the rules and etiquette of golf, and basic golf equipment.
1 lecture hour and 1 laboratory/demonstration hour per week
1 credit hour

NRML 120 – LPN Transition Course Laboratory
This is a co-requisite laboratory course for NURM 120.
Co-requisite(s): NURM 120

NRML 121 – Nursing I Laboratory
This is a co-requisite laboratory course for NURM 121.
Co-requisite(s): NURM 121

NRML 122 – Nursing II Laboratory
This is a co-requisite laboratory course for NURM 122.
Co-requisite(s): NURM 122

NRML 141 – Accelerated Nursing Laboratory – Spring NURM
This is a co-requisite laboratory course for NURM 141.
Co-requisite(s): NURM 141

NRML 221 – Nursing III Laboratory
This is a co-requisite laboratory course for NURM 221.
Co-requisite(s): NURM 221

NRML 222 – Nursing IV Laboratory
This is a co-requisite laboratory course for NURM 222.
Co-requisite(s): NURM 222

PHI 205 – Introduction to Philosophy
This course is an introduction to philosophy. The course examines the nature of philosophy, its objectives, its major areas of focus, and its methods. The course is organized around the study of major problems and pertinent questions in philosophy, including the nature of reality, the uniqueness of the human person, the process of acquiring knowledge, and ethical dilemmas involving human decision making. Philosophical problems and related issues are explored through selected readings in philosophy that introduce the student to major philosophers within the Western philosophical tradition.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

PHI 206 – History of Ancient and Medieval Philosophy
This course is a study of the major figures and movements in Western thought from the early Greeks to the end of the Middle Ages. The central part of the course is devoted to Plato, Aristotle, Augustine, and Thomas Aquinas. Selected works are read and analyzed.
Prerequisite(s): HIS 101, HIS 102
3 lecture hours per week
3 credit hours

PHI 207 – History of Modern Philosophy
This course is a study of the major figures and movements in Western thought from 1600 to the present. The course focuses on the philosophies of Hobbes, Descartes, Hume, and Kant. Selected works are read and analyzed.
Prerequisite(s): HIS 101, HIS 102
3 lecture hours per week
3 credit hours

PHI 208 – Social Justice
This course analyzes the major theories of social justice, focusing on philosophical assumptions and practical applications. Special consideration is given to the problems of political obligation and individual autonomy, the distribution of social goods, sovereignty, political disobedience, the nature of law, and justifications of punishment.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

PHI 210 – Ethics
This course focuses on both ethical theory and applied ethics as classical and contemporary ethical theories are examined and a variety of ethical issues and dilemmas are considered.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours

PHI 212 – Logic and Critical Thinking
This course explores the elements of sound reasoning, including the nature of arguments and various forms of reasoning. Students will examine rhetorical devices as well as informal and formal fallacies. Examples of fallacious reasoning will be drawn from politics, advertising, business, morality, and religion. The course is designed to enhance students’ critical thinking and promote success in academic inquiry across the disciplines.
Prerequisite(s): ENG 097, if required
3 lecture hours per week
3 credit hours
PHY • Physics

▲ PHY 101 – General Physics I
This is a general education, algebra-based, general physics course. It is the first in a two-course sequence. This course covers the following basic concepts: measurement, composition and resolution of forces, force systems, kinematics of a particle, dynamics of a particle, systems of forces, rotational motion, work, energy and power, momentum, and the mechanics of fluids.
Prerequisite(s): MAT 119
Co-requisite(s): PHYL 111
3 lecture hours per week
3 credit hours

▲ PHY 102 – General Physics II
This physics course is the second part of a general education, algebra-based, multi-semester sequence. This course covers the basic concepts of temperature and heat, thermal expansion, heat transfer, ideal gas laws, the elastic properties of solids and liquids, thermodynamics, wave motion, stationary waves, sound waves, acoustics, light and illumination, reflection, refraction, thin lenses, optical instruments, physical optics, electrostatics, capacitance, electric circuits, power, magnetism, induced E.M.F., inductance, and simple AC circuits.
Prerequisite(s): PHY 101
Co-requisite(s): PHYL 112
3 lecture hours per week
3 credit hours

▲ PHY 111 – Mechanics
This is a general education, calculus-based physics course. It is the first in a two-course sequence. This course covers the study of classical mechanics including kinematics, projectile and circular motion, friction, work and energy, impulse and momentum, conservation of energy and momentum, static equilibrium, rotational dynamics, and fluids.
Prerequisite(s): MAT 171
Co-requisite(s): PHYL 112
3 lecture hours per week
3 credit hours

▲ PHY 125 – Elements of Physics
This is a general education lab science course. This course covers the fundamental ideas and concepts of physics in the following topics: measurements and units, motion of bodies, forces, work and energy, momentum, temperature and heat, waves, optics, electricity and magnetism, radiation, and atomic and nuclear physics.
Prerequisite(s): MAT 119
Co-requisite(s): PHYL 125
3 lecture hours per week
3 credit hours

▲ PHY 201 – Electricity and Magnetism
This physics course is the second part of a calculus-based, multi-semester sequence. The course covers the basic concepts of electrostatics, electric and magnetic fields, electromagnetism, electric and magnetic circuits, induced electromotive forces, fundamental electrical measurements, circuits containing inductance and capacitance, and basic electronics.
Prerequisite(s): PHY 111
Co-requisite(s): PHYL 201
3 lecture hours per week
3 credit hours

PHY 202 – Optics and Modern Physics
This course is a study of geometrical and physical optics, the ideas of modern physics, radiant energy, relativistic mass-energy, electrons, photons, their interactions, atomic structure, nuclear structure, and reactions.
Prerequisite(s): PHY 201
Co-requisite(s): PHYL 202
3 lecture hours per week
3 credit hours

PHYL • Physics Lab

▲ PHYL 102 – General Physics II Laboratory
Physics laboratory to accompany PHY 102.
Prerequisite(s): PHY 102
3 laboratory hours per week
1 credit hour

▲ PHYL 111 – Mechanics Laboratory
This physics laboratory course accompanies PHY 101, General Physics I or PHY 111, Mechanics. It covers the study of classical mechanics including kinematics, projectile and circular motion, Newton’s laws of motion, friction, work and energy, impulse and momentum, conservation of energy and momentum, static equilibrium, rotational dynamics, and fluids.
Prerequisite(s): MAT 171
Co-requisite(s): PHY 101 or PHYL 111
3 laboratory hours per week
1 credit hour

▲ PHYL 125 – Elements of Physics Laboratory
Physics laboratory to accompany PHY 125.
Prerequisite(s): PHY 125
2 laboratory hours per week
1 credit hour

▲ PHYL 201 – Electricity and Magnetism Laboratory
Physics laboratory to accompany PHY 201.
Co-requisite(s): PHY 201
3 laboratory hours per week
1 credit hour

PHYL 202 – Optics and Modern Physics Laboratory
Physics laboratory to accompany PHY 202.
Co-requisite(s): PHY 202
3 laboratory hours per week
1 credit hour

PMD • Paramedic

PMD 110 – Paramedic I
This course will focus on an introduction to NJ EMS operational model. Students will gain knowledge in the roles, responsibilities, and regulations which govern the profession. There will be a review of human structure and function that will relate to specific assessment skills and understanding of treatment modalities. Information will be presented on pharmacology, drug dosage calculation and administration, trauma, airway management and cardiology.
Prerequisite(s): PHYL 111
Co-requisite(s): PHYL 106 and BIOL 106
8 lecture and 9 laboratory hours per week
11 credit hours

PMD 113 – Paramedic Clinical I
This clinical course provides hands-on learning experiences for paramedic students in the hospital clinical setting. Specific clinical areas include interventions for advanced airway management, respiratory care, IV access, and cardiac care. Skills learned and demonstrated in the lab will be applied in the clinical area.
Prerequisite(s): PMD 110, BIO 106, and BIOL 106
Minimum 90 total clinical hours
2 credit hours

PMD 114 – Paramedic Clinical II
This course provides the educational clinical experience required to prepare the student to achieve licensure as a Paramedic. The clinical/field rotations are meant for application of learned theory and patient care skills, while under the direct observation and guidance of a preceptor. Clinical rotations will adhere to the NJ A.C. 8:412A for required experiences. The majority of the course hours will be completed at an acute care clinical site.
Prerequisite(s): PMD 110 and PMD 113
135 clinical hours
3 credit hours

▲ = Fulfills a General Education Requirement
PMD 215 – Paramedic Field Internship
This course builds upon the information and clinical lab experiences of PMD 210. Further information is provided on assessments, interventions, and pharmaceutical agents that are used by paramedics for medical emergencies. Advanced EKG interpretation and age-specific content will be presented, along with disaster management. Lab experiences will reinforce classroom content and serve to demonstrate students’ competency in specific assessment skills and management of emergency situations. Prerequisite(s): PMD 213 and PMD 214
Co-requisite(s): PMD 214
8 lecture and 9 laboratory hours per week
11 credit hours

PMD 214 – Paramedic Clinical III
This clinical course provides the educational clinical experience required to prepare the student to achieve certification as a paramedic. Clinical rotations are meant for application of learned theory and patient care skills, while under the direct observation and guidance of a preceptor. Specific clinical areas as outlined by N.J.A.C. 8:41A Category II. Skills learned and demonstrated in the lab will be applied in the clinical area. Prerequisite(s): PMD 114, EMT-B, CPR, ACLS, and PALS certification must remain current while enrolled
1 theory credit; minimum 180 total clinical hours
5 credit hours

PMD 213 – Paramedic II
This course builds upon the information and clinical lab experiences of PMD 210. Further information is provided on assessments, interventions, and pharmaceutical agents that are used by paramedics for medical emergencies. Advanced EKG interpretation and age-specific content will be presented, along with disaster management. Lab experiences will reinforce classroom content and serve to demonstrate students’ competency in specific assessment skills and management of emergency situations. Prerequisite(s): PMD 110, PMD 113, and PMD 114
Co-requisite(s): PMD 214
8 lecture and 9 laboratory hours per week
11 credit hours

PNU • Practical Nursing

PNU 190 – Nursing Concepts
This course introduces the Practical Nursing student to the profession of nursing and the role of the LPN. Trends in nursing practice and the health care delivery system will be discussed. The integration of self-care and critical thinking principles into the nursing process will be a key focus. Fundamental nursing concepts and practices for health promotion, including communication, patient teaching, assessment, nutritional support, and general pharmacological and safety principles, will be presented. Students will practice and demonstrate beginning proficiency in selected skills, including the calculation of drug dosages, measurement of vital signs, hygienic care, application of standard precautions, and the use of medical terminology. Prerequisite(s): All Developmental Course Work, GPA 2.5
Co-requisite(s): ENG 101 or ENG 112, BIO 102 or BIO 106, PSY 101
60 lecture hours and 45 clinical lab hours
5 credit hours (4 theory, 1 clinical lab)

PNU 191 – Adult Health I
In this course, the student will continue to use the nursing process, within the self-care framework, to assist adult patients in meeting their physiological and psychosocial self-care requisites in the long term and acute care setting. Emphasis will be placed on patient assessment and an understanding of the commonly occurring and chronic conditions that alter an individual’s state of wellness. Care of patients pre- and postoperatively, and those experiencing fluid and electrolyte imbalances, infectious diseases, and selected cardiovascular, respiratory, musculoskeletal, and endocrine deviations will be discussed. Principles of clinical reasoning and therapeutic communication will be integrated throughout the course. Content that is presented in the classroom will be reinforced with clinical experiences in the skills laboratory and patient care settings where students will apply basic nursing principles and techniques. Prerequisite(s): PNU 190, ENG 101 or ENG 112, BIO 102 or BIO 106, PSY 101, GPA 2.5
Co-requisite(s): Elective
105 lecture hours and 135 clinical lab hours
9 credit hours (7 theory, 3 clinical lab)

PNU 210 – Maternal/Child, Pediatric, and Mental Health Nursing
The focus of this course is the role of the Practical Nurse as a member of a multidisciplinary health team caring for patients and their families in obstetrical, pediatric, and mental health settings. Knowledge and skills are developed that will assist patients to attain self-care requisites, including therapeutic communication, application of growth and development principles, and incorporation of legal and ethical guidelines. Health promotion, maintenance, and restoration are emphasized in clinical experiences with patients and their families. Economic and sociocultural issues that influence the patient and family will be discussed. The student will continue to use the nursing process within the self-care framework in providing care to patients during clinical experiences in inpatient and/or ambulatory obstetric, pediatric, and mental health settings. Prerequisite(s): PNU 191, Elective, GPA 2.5
Co-requisite(s): PSY 204
90 lecture hours and 135 clinical lab hours
9 credit hours (6 theory, 3 clinical lab)

PNU 211 – Adult Health II & Role Transition
In this course, the student focuses on meeting the holistic self-care needs of the adult patient in the acute care setting. In collaboration with the clinical instructor and RN health team member, the student will be given the opportunity to demonstrate use of critical thinking skills in collecting subjective and objective information, prioritizing care, intervening in meeting patient basic care needs, evaluating outcomes of care, and recording and reporting concepts. Concepts introduced in previous nursing courses are expanded and integrated into clinical and theory experiences. Emphasis in theory will be placed on more complex acute medical-surgical health deviations, the assessment of signs and symptoms and recognition of medical and nursing interventions, including medication and nutrition therapies. Critical thinking skills will continue to be an avenue for student success in test-taking and clinical performance. Concepts of role transition and accountability will be discussed, as well as skills required for obtaining employment in a health care agency. Content reviews, focused testing, and a clinical practicum will assist the student to prepare for the NCLEX – PN Licensure Examination and the assumption of a position as a Licensed Practical Nurse. Prerequisite(s): PNU 210, PSY 204, GPA 2.5
120 lecture hours, 180 clinical lab hours
12 credit hours (8 theory, 4 clinical lab)
▲ PSY 101 – General Psychology
This course is an introduction to the scientific study of behavior and mental processes. Includes topics such as research methods, the neurological bases of behavior, consciousness, sensation and perception, learning, memory, thinking and intelligence, personality, motivation and emotion, development, psychological disorders and social psychology.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

▲ PSY 102 – Psychology of Personality
This course explores personality dynamics in light of the major theories of personality, including Freudian, behavioral, trait, cognitive, socio-cultural, humanist and other perspectives. Included are an introduction to theory construction, personality assessment, and theories of deviance.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

PSY 105 – Group Dynamics
This course is an investigation of the roles and behavior of people in small group settings. Topics include roles and norms, leadership, decision processes, interpersonal communication, membership, attraction, and group theory. Participation in small group projects emphasized.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

▲ PSY 204 – Lifespan Development
This course provides the context to understand the significant processes that shape human development over the course of human life. The focus of this course is the scientific study of the biological, psychological, cognitive, emotional, personal, and social changes throughout life span, beginning with prenatal development, through infancy, early and middle childhood, adolescence and the major adult stages, (early, middle, late, and issues related to the end of life). Controversial and ethical issues relevant to lifespan development and the scientific study of human development will be studied.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

▲ PSY 205 – Child Psychology
This course is a study of childhood development and psychology. Particular focus will be on physical, cognitive, and socioemotional development from the prenatal period to preadolescence.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

▲ PSY 206 – Adolescent Psychology
The course is a study of biological, social, emotional and cognitive development during adolescence. The course will focus on the transitions occurring within these major domain areas and on developmentally relevant segments such as peer, family, authority, identity autonomy, sexuality, general and academic achievement, and issues of adjustment.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

PSY 207 – Social Psychology
The course will focus on the ways in which human behavior influences and is influenced or determined by the social situations in which it occurs. Topics include: social persuasion and perception, attitudes, prejudice, interpersonal attraction, aggression, conformity, and group dynamics.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

PSY 208 – Abnormal Psychology
This course is a study of anxiety disorders, depression, schizophrenia, and other maladaptive behavior patterns, with emphasis on current concepts of their origin and treatment.
Prerequisite(s): PSY 102 or permission of Division Dean’s office
3 lecture hours per week
3 credit hours

PSY 211 – Current Issues in Psychology
This course prepares students to present and explore current social and psychological issues. Material could include but not be limited to dating, parenting, depression, drug use, behavioral disorders, eating disorders, sexually transmitted diseases and adolescent suicide.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

▲ PSY 212 – Psychology of Adulthood and Aging
This course is an investigation of the theory and research involved in the study of the psychology of adulthood and aging. Particular attention is focused on role and identity changes, personality changes, intelligence, sexuality, the psychosocial aspects of work and retirement, and death and dying.
Prerequisite(s): PSY 101
3 lecture hours per week
3 credit hours

PSY 213 – (SOC 213) Social Research Methods
This course explores the application of scientific methods to the study of human behavior and social interaction. The relationship between theory and research is examined. Students develop skills in understanding and using such techniques as case studies, surveys, experiments, participant observation, testing, and basic statistical devices to analyze data.
Required prerequisite: PSY 101 or SOC 101
3 lecture hours per week
3 credit hours

PSY 219 – Child Abnormal Psychology
This course will introduce the student to maladaptive behavior in children and adolescents. Areas of discussion include mental retardation, attention deficit disorder, conduct disorders, mood disorders, learning disabilities and pervasive developmental disorders. Students will learn theoretical explanations for the development of the disorders and learn about diagnostic classification.
Prerequisite(s): PSY 101 and PSY 205, or permission of the Division Dean’s office
3 lecture hours per week
3 credit hours

PSRT • Psychosocial Rehabilitation – Rutgers

PSRT 1019 – Clinical Practicum in Psychosocial Rehabilitation I
Students will observe and identify common interventions for working with the individual with serious mental illness. Clinical experiences (16 hours weekly, for a minimum of 240 hours) will emphasize participation in group activities, on program tasks, skills training and skills practice. Classroom lectures and seminars will provide students with opportunities to integrate theory with practical experience.
Prerequisite(s): UPR 1102, PSRT 1103, PSRT 1204
3 lecture hours and 16 clinical hours per week
6 credit hours

THIS COURSE IS ONLY AVAILABLE TO STUDENTS WHO HAVE BEEN ACCEPTED INTO A RUTGERS PROGRAM. FOR THE MOST CURRENT COURSE DESCRIPTION VISIT HTTP://SHRP.RUTGERS.EDU

PSRT 1101 (UPR 1101) – Introduction to the Principles of Psychosocial Rehabilitation
Enables students to identify the methods by which individuals with severe mental illness are helped in psychosocial rehabilitation and treatment settings. Classroom lectures and seminars provide students with opportunities to explore concepts unique to psychosocial rehabilitation, including history, philosophy, and values of psychosocial rehabilitation.
3 lecture hours per week
3 credit hours

▲ = Fulfills a General Education Requirement
COURSE DESCRIPTIONS

PSRT 1204 – Clinical Principles in Psychosocial Rehabilitation and Treatment
Introduces students to an understanding of psychopathology as it is addressed through psychosocial rehabilitation intervention efforts. Students will be able to define and differentiate between mental health and mental illness. The use of common psychotropic drugs and their side effects will also be covered. Current psychiatric practices will be discussed.
Prerequisite(s): UPR 101 (PSRT 1101)
3 lecture hours per week
3 credit hours

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PSRT 2019 – Clinical Practicum in Psychosocial Rehabilitation II
 Enables students to continue to develop intervention skills and strategies. Faculty supervised field experience (16 hours weekly, for a minimum of 240 hours) provides students with opportunities to develop appropriate clinical judgment, as well as initial participation in service planning and choice of interventions. Students will begin to lead activities under supervision and be introduced to documentation requirements.
Prerequisite(s): PSRT 1019
3 lecture hours and 16 clinical hours per week
6 credit hours

THIS COURSE IS ONLY AVAILABLE TO STUDENTS WHO HAVE BEEN ACCEPTED INTO A RUTGERS PROGRAM. FOR THE MOST CURRENT COURSE DESCRIPTION VISIT HTTP://SHRP.RUTGERS.EDU

PSRT 1102 – Communication Techniques in Interviewing and Counseling
Introduces students to the principles and skills necessary for the effective use of therapeutic communication. The student will learn about values and attitudes impacting on professional interpersonal relationships. Classroom lectures and practice sessions expose students to interviewing, and helping principles through active participation in a faculty supervised clinical practice.
Prerequisite(s): UPR 101 (PSRT 1101) or permission of Division Dean’s office
2 lecture hours and 2 laboratory hours per week
3 credit hours

THIS COURSE IS ONLY AVAILABLE TO STUDENTS WHO HAVE BEEN ACCEPTED INTO A RUTGERS PROGRAM. FOR THE MOST CURRENT COURSE DESCRIPTION VISIT HTTP://SHRP.RUTGERS.EDU

PSRT 1103 – Introduction to Group Dynamics
Introduces the student to the principles, and skills necessary for the effective use of groups to engage people, and achieve goals. Classroom lectures and practice sessions demonstrate group dynamics, and group process. Students also participate in faculty supervised group experiences.
Prerequisite(s): UPR 101 (PSRT 1101) or permission of Division Dean’s office
2 lecture hours and 2 laboratory hours per week
3 credit hours

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PSRT 2121 – Community Resource Management and the Individual with Severe Mental Illness
Introduces students to the principles and practices of systems utilization for the improved functioning of people with psychiatric disabilities. Needs evaluation and goal formulation will be the basis of case coordination and resource linking within a systems framework. Lectures and course activities provide students with opportunities to explore the relationship of services to the individual’s needs. Web based course.
Prerequisite(s): UPR 101 (PSRT 1101), PSRT 1102, PSRT 1103, and PSRT 1204
3 lecture hours per week
3 credit hours

THIS COURSE IS ONLY AVAILABLE TO STUDENTS WHO HAVE BEEN ACCEPTED INTO A RUTGERS PROGRAM. FOR THE MOST CURRENT COURSE DESCRIPTION VISIT HTTP://SHRP.RUTGERS.EDU

PTA 115 – Functional Anatomy
This course is the study of neuro-musculo-skeletal structures with an emphasis on the function of typical human movement. Topics studied will include basic human kinesiology and biomechanics, posture and gait analysis, goniometry and manual muscle testing.
Prerequisite(s): [All with a grade of “C” or better] BIO 105, ENG 101, MAT 119, and PSY 101
Co-requisite(s): PTAL 115, PTA 130, and PTA 251
2 lecture hours and 3 laboratory hours per week
3 credit hours

PTA 130 – Physical Therapy Procedures I
This course teaches the student to implement basic physical therapy treatment programs. Didactic and laboratory practice are included for heat, light, and hydrotherapy modalities, ambulation, massage, bed positioning, wheelchair maneuverability, and transfers. Lab practice for selected nursing procedures is also included.
Prerequisite(s): [All with a grade of “C” or better] BIO 105, ENG 101, MAT 119, and PSY 101
Co-requisite(s): PTAL 130, PTA 115, and PTA 251
3 lecture hours and 9 laboratory hours per week
6 credit hours

PTA 140 – Physical Therapy Procedures II
This course is a study of pathological processes, assessments, and appropriate physical therapy procedures for selected orthopedic conditions commonly seen in physical therapy. A problem-solving approach will be utilized to provide the student the opportunity to identify patients’ needs and determine treatment modifications as per the PTA scope of practice.
Prerequisite(s): PTA 115, PTA 130, and PTA 251 all with a minimum grade of “C+”
Co-requisite(s): PTA 140
1 lecture hour and 6 laboratory hours per week
3 credit hours

PTA • Physical Therapist Assistant

PSRT 2231 – Emerging Topics in Psychosocial Rehabilitation and Treatment
Acquaints the students with emerging developments in the field of psychosocial rehabilitation and treatment, focusing on current issues and trends. The purpose of the course is to help the student conceptualize psychosocial rehabilitation as a diverse and evolving field. Web based course.
Prerequisite(s): PSRT 1019, PSRT 2121
3 lecture hours per week
3 credit hours

THIS COURSE IS ONLY AVAILABLE TO STUDENTS WHO HAVE BEEN ACCEPTED INTO A RUTGERS PROGRAM. FOR THE MOST CURRENT COURSE DESCRIPTION VISIT HTTP://SHRP.RUTGERS.EDU
PTA 217 – Clinical Seminar and Practice I
This course is designed to integrate the students' clinical and didactic experiences by developing problem solving and interpersonal skills. Topics studied will include the health delivery system, legal and ethical issues relating to Physical Therapy intervention, documentation skills, and an introduction to The Guide to Physical Therapy Practice. The course will also explore the elements of effective interaction between a PTA and other professionals as well as the PTA and the patient. Areas including verbal and non-verbal communication, personal and cultural bias and social versus therapeutic helping relationships will be discussed. The students will participate in two days of supervised PTA clinical experience per week. Students must provide their own transportation.
Prerequisite(s): All previous professional coursework with a minimum grade of “C+”, or better
Co-requisite(s): PTAL 217, PTA 220, PTA 221, ENG 102, and BIO 106
2 lecture hours and 15 clinical hours per week
7 credit hours

PTA 220 – Physical Therapy Procedures III
This course is the study of pathophysiological processes, medical treatments and appropriate physical therapy procedures for selected medical and pediatric conditions commonly seen in physical therapy. Physical therapy treatments will include advanced therapeutic exercises and ADL modalities, electrotherapy and orthotics in relation to each neurological condition.
Prerequisite(s): All previous professional coursework with a minimum grade of “C+”, or better
Co-requisite(s): PTAL 220, PTA 217, and PTA 221
4 lecture hours and 6 laboratory hours per week
6 credit hours

PTA 221 – Physical Therapy Procedures IV
This course is a study of pathophysiological processes, medical treatments, and appropriate physical therapy procedures for selected medical and pediatric conditions commonly seen in physical therapy. Physical therapy treatments will include advanced therapeutic exercise, ADL, and assistive devices in relation to each pediatric and medical condition.
Prerequisite(s): All previous professional coursework with a minimum grade of “C+”, or better
Co-requisite(s): PTAL 221, PTA 217, and PTA 220
3 lecture hours and 3 laboratory hours per week
4 credit hours

PTA 223 – Clinical Seminar
This capstone course is the study of advanced topics in physical therapy education, including therapeutic exercise, psychosocial aspects of disability and dying, continuation of total treatment programs for selected conditions, ethical issues and entry level preparation.
Prerequisite(s): ENG 102, PTA 217, PTA 220, and PTA 221 all passed with a grade of “C+” or better
Co-requisite(s): PTA 224
2 lecture hours per week
2 credit hours

PTA 224 – Clinical Practice II
Students will participate in a full-time supervised Physical Therapist Assistant clinical experience for 14 weeks. Students must provide their own transportation.
Prerequisite(s): PTA 217, PTA 220, and PTA 221. All previous professional coursework with a minimum grade of “C+”, or better
Co-requisite(s): PTA 223
36 clinical hours per week
12 credit hours

PTA 251 – Independent Living
This course is the study of barriers that impact people living with disabilities. The course offers the student an opportunity to explore and problem solving the functional limitations of a given disability.
Prerequisite(s): All passed with a grade of “C” or better: BIO 105, ENG 101, MAT 119, and PSY 101
2 lecture hours per week
2 credit hours

RADM 110 – Principles of Radiographic Exposure I
In this first course in a series, the student will be introduced to the concepts and terminology of movement in relation to body parts. X-ray beam direction, body positions, projections and views will be explained. Anatomy, limited pathology and radiographic positioning of the chest, abdomen, upper extremity and shoulder girdle are included. A critical thinking module as related to film evaluation and clinical situations will be introduced. Clinical education based on competency evaluation parallels the course content and are an integral part of this course.
3 lecture hours per week
3 credit hours

RADM 120 – Radiologic Procedures I
This is a co-requisite laboratory course for PTA 220.
Co-requisite(s): PTA 220
3 lecture hours per week
3 credit hours

RADM 121 – Radiologic Procedures II
This is a co-requisite laboratory course for PTA 221.
Co-requisite(s): PTA 221

RADM – Radiography, Muhlenberg

PTAL 220 – Physical Therapy Procedures III Laboratory
This is a co-requisite laboratory course for PTA 220.
Co-requisite(s): PTA 220

PTAL 221 – Physical Therapy Procedures IV Laboratory
This is a co-requisite laboratory course for PTA 221.
Co-requisite(s): PTA 221

RADM 110 – Principles of Radiographic Exposure I
In this first course in a series, the student will be introduced to the concepts and terminology of movement in relation to body parts. X-ray beam direction, body positions, projections and views will be explained. Anatomy, limited pathology and radiographic positioning of the chest, abdomen, upper extremity and shoulder girdle are included. A critical thinking module as related to film evaluation and clinical situations will be introduced. Clinical education based on competency evaluation parallels the course content and are an integral part of this course.
3 lecture hours per week
3 credit hours

RADM 120 – Radiologic Procedures I
This is a co-requisite laboratory course for PTA 220.
Co-requisite(s): PTA 220
3 lecture hours per week
3 credit hours

RADM 121 – Radiologic Procedures II
This is a co-requisite laboratory course for PTA 221.
Co-requisite(s): PTA 221

RADM – Radiography, Muhlenberg
RADM 211 – Radiologic Procedures III
This course includes a review of the skull anatomy. Bones, topographic landmarks and positioning lines will be identified. Positioning skills for routine skull radiography, facial bones and paranasal sinuses are included. A critical thinking module as related to film evaluation and clinical situations will be used. Clinical education based on competency evaluation parallels the course content and are an integral part of this course.
2 lecture hours per week
2 credit hours

RADM 122 – Radiologic Procedures III
This course will provide the student with the knowledge of basic physics as it relates to ionizing radiation and the principles of electromagnetism. Voltage, current, power and transformer law formulas are presented. The course includes investigation of the construction of the x-ray tube and circuit and the tests required to insure equipment and patient safety.
Prerequisite(s): RADM 110 or PHY 101
Co-requisite(s): RADM 211
3 lecture hours per week
3 credit hours

RADM 212 – Radiologic Physics
This course will provide the student with the knowledge of basic physics as it relates to ionizing radiation and the principles of electromagnetism. Voltage, current, power and transformer law formulas are presented. The course includes investigation of the construction of the x-ray tube and circuit and the tests required to insure equipment and patient safety.
Prerequisite(s): MAT 119, PHY 125 orPHY 101
Co-requisite(s): RADM 211
3 lecture hours per week
3 credit hours

RADM 213 – Radiographic Equipment
This course is designed to assist the student in the development of a knowledge base in routine radiographic and fluoroscopic equipment, mammographic and tomographic equipment including, computed tomographic and radiographic (CT and CR) units, mobile units and digital imaging equipment and systems. Quality Assurance and Quality Control requirements will also be discussed.
3 lecture hours per week
3 credit hours

RADM 214 – Radiologic Procedures IV
This course is a continuation of the concepts, techniques, procedures and critical thinking skills learned in previous radiographic procedures courses. Students will be given an overview of various imaging modalities including: Nuclear Medicine, Radiation Therapy, Sonography, Computed Tomography and Magnetic Resonance Imaging. Additionally the cardiovascular and central nervous systems, long bone measurement, foreign body localization, female reproductive radiography, pediatric radiography, geriatric radiography, arthrography and trauma radiography will be discussed. A critical thinking module as related to film evaluation and clinical situations will be used. Clinical education based on competency evaluation parallels the course content and is an integral part of this course.
3 lecture hours per week
3 credit hours

RNTL • Radiology Imaging, Muhlenberg

RNTL 201 – CT Skills Assessment
This course is offered to Radiography students and licensed/registered Radiographers who are eligible to perform Computed Tomography procedures at accredited medical institutions. In addition to the topics covered in RNTM 201, RNTL 201 requires 45 clinical experience hours in a CT facility. Clinical proficiency exams in several procedures included in the American Registry of Radiologic Technologists (ARRT) certification requirements competencies must be demonstrated. In addition, students observe and assist CT technologists in the clinical setting and experience & evaluate the quality of CT images.
Pre-Co-requisite(s): RNTM 201
3 clinical hour per week
1 credit hour

RNTM 101 – Medical Terminology
This Web-enhanced course is designed to introduce the student to the language of the Medical profession. It includes terminology relating to body systems and organs and provides a comprehensive study appropriate for all allied health modalities. Offered only online.
1 credit hour

RNTM 102 – Health Care Today
This Web-enhanced course is designed to create a broad overview of today’s healthcare industry. It will introduce the student to delivery of healthcare, economics, insurance programs administrative roles, leadership, management, budget and planning, internal politics, capital allocation, operating budgets, government roles, and employee relations.
RADIOGRAPHY – Prerequisites:
RNTM 101, RNTM 103, RADM 120
SONOGRAPHY – Prerequisite:
DMSM 100. Offered only online
2 credit hours
RNTM 103 – Introduction to Medical Imaging
This course is specific to hospital imaging departments. Medical radiology offices and clinic providing medical imaging services. It addresses both patient care skills and radiation protection. Special consideration is focused on the basic emotional, physical and diverse cultural needs of patients, infection control, safety, medicolegal and ethical issues, surgical asepsis, pharmacology, vital signs and identification of emergency situations. The radiographers role in patient, public, and personnel radiation protection is emphasized. The concepts of ALARA and Dose Equivalent Limit are compared and regulatory agencies are identified. The agencies involved in radiation protection are discussed.
4 lecture hours per week
4 credit hours

RNTM 201 – Fundamentals of Computed Tomography
This course is designed to provide a basic overview of the fundamentals of Computed Tomography (CT) technology. Equipment, instrumentation, image processing, reconstruction, patient safety, cross sectional anatomy and patient positioning will be discussed. CT involves the use of rotating x-ray equipment, combined with a digital computer, to obtain cross sectional images of the body. This course is offered to both radiographers and non-radiographers.
3 lecture hours per week
3 credit hours

RSP • Respiratory Care

RSP 101 – Fundamentals of Respiratory Care
This course provides an orientation to general patient assessment which includes infection control, patient safety, patient interviewing, ethics, communication, record keeping, electronic record management and clinical laboratory studies. In addition, students will be introduced to basic therapeutic concepts and modalities used in respiratory therapy. These concepts are principles of infection control, gas laws and physics, gas exchange, oxygen transport, regulation of breathing, and patient assessment. There is a focus on basic therapeutics including medical gas delivery, humidity & aerosol therapy, and basic respiratory pharmacology. The course also includes a discussion of signs of sudden cardiac arrest, heart attack, stroke, and foreign body obstruction.
Prerequisite(s): MAT 113, BIO 105, and PSY 101
Co-requisite(s): ENG 101, RSP 102, and RSP 110
2 lecture, 3 laboratory, and 6 clinical hours per week
5 credit hours

RSP 102 – Cardiopulmonary Pharmacology
This course provides an overview of drugs affecting the cardiopulmonary system, including bronchodilators, corticosteroids, anti-infectives (and antibiotics), skeletal muscle relaxants, central nervous system depressants, respiratory stimulants, diuretics and cardiovascular agents.
Prerequisite(s): MAT 113, BIO 105, and PSY 101
Co-requisite(s): ENG 101, RSP 101, and RSP 110
2 lecture hours per week
2 credit hours

RSP 110 – Cardiopulmonary Anatomy and Physiology
The course is a study of the anatomy and physiology of the cardiopulmonary system as it relates to respiratory care and includes basic anatomy of the pulmonary and cardiac system, physiology of circulation, gas exchange, control of respiration and an overview of the pathophysiology and treatment of common disorders of the cardiopulmonary system. In addition, the course will survey the renal system and its effects on the respiratory and cardiovascular systems.
Prerequisite(s): MAT 113, BIO 105, and PSY 101
Co-requisite(s): ENG 101, RSP 101, and RSP 102
2 lecture hours per week
2 credit hours

RSP 111 – Fundamentals of Respiratory Critical Care
This course builds on the foundation of RSP 101, Fundamentals of Respiratory Care. The course provides knowledge and skills in advanced airway management, arterial blood gas interpretation, sampling techniques, equipment use in analysis, and non-invasive ventilation. The course also provides an introduction to concepts and techniques in invasive ventilation, methods of bronchoscopy and the role of the respiratory therapist in assisting the physician during invasive diagnostic procedures.
Prerequisite(s): MAT 113, BIO 105, PSY 101, RSP 101, RSP 102, and RSP 110
Co-requisite(s): ENG 102 and BIO 106
2 lecture, 6 laboratory, and 12 clinical hours per week
8 credit hours

RSP 112 – Cardiopulmonary Pathophysiology
This course is an introduction to the assessment and pathophysiology of patients with cardiopulmonary disease. Emphasis is on assessment of oxygenation, ventilation and acid base balance. Additional course content includes an introduction to pulmonary pathophysiology emphasizing differences in obstructive and restrictive lung disease.
Prerequisite(s): ENG 102, BIO 106, RSP 111, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113
Co-requisite(s): RSP 201 and RSP 202
2 lecture hours per week
2 credit hours

RSP 201 – Cardiopulmonary Evaluation
This course covers invasive and non-invasive diagnostic and monitoring procedures used in Respiratory Care and Intensive Care Medicine. Additional course content includes indications, techniques, complications and result interpretation of the following diagnostic procedures: chest radiology, electrocardiography, pulmonary function testing, hemodynamic monitoring, arterial blood gas analysis, physical assessment, laboratory testing and mechanical ventilation.
Prerequisite(s): RSP 112, RSP 111, BIO 106, ENG 102, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113
Co-requisite(s): RSP 202, and RSP 210
2 lecture hours per week
3 credit hours

RSP 202 – Adult Critical Care
This course covers the physiologic principles and clinical procedures used in both invasive and noninvasive artificial ventilatory support to adults. Topics discussed in this course include: airway management, respiratory failure, physics and physiology of ventilatory support, initiating and adjusting ventilatory support, managing and monitoring the patient in respiratory failure, and discontinuing ventilatory support.
Prerequisite(s): RSP 112, RSP 111, BIO 106, ENG 102, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113
Co-requisite(s): RSP 201, and RSP 210
2 lecture, 6 laboratory, and 18 clinical hours per week
10 credit hours

RSP 210 – Long-Term, Home and Rehabilitation Care
This course consists of an analysis of the goals and methods underlying the delivery of respiratory care in non-acute settings. It includes standards and regulations governing non-acute respiratory care, team planning, patient selection, documentation of various clinical services in the home and in long-term care and rehabilitation facilities. Also included in this course are factors in the costs and reimbursement of services and ethical issues arising in the non-acute setting. This course also discusses current issues and trends in respiratory care practice and out-patient education for asthma and Chronic Obstructive Pulmonary Disease.
Prerequisite(s): RSP 112, RSP 111, BIO 106, ENG 102, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113
Co-requisite(s): RSP 201 and RSP 202
2 lecture hours per week
2 credit hours
### RSP 211 – Neonatal Pediatric Respiratory Care

This course provides a comprehensive review of pediatric and neonatal respiratory care. Special considerations of respiratory care practice unique to pediatrics and neonatology are discussed, including pediatric anatomy and physiology, fetal development, clinical assessment, oxygen therapy, airway management, mechanical ventilation, resuscitation, cardiopulmonary pathophysiology and disorders specific to this patient population. Content also includes a discussion of ethical and cultural considerations in the care of the child and family.

Prerequisite(s): RSP 210, RSP 202, RSP 201, RSP 112, RSP 111, BIO 106, ENG 102, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113

3 lecture hours per week
3 credit hours

### RSP 212 – Clinical Practice

This clinical practice rotation is designed to provide supervised experiences in both acute care and alternative settings, with an emphasis on developing the skills necessary to function independently. Experiences include cardiopulmonary diagnostics, critical care of the adult, infant and child, and long-term, home and rehabilitative care.

Prerequisite(s): RSP 210, RSP 202, RSP 201, RSP 112, RSP 111, BIO 106, ENG 102, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113

Corequisite(s): RSP 211 and RSP 213

7 clinical hours per week
21 clinical hours

### RSP 213 – Special Topics Respiratory Care

This course is an in-depth study of the clinical management of the cardiopulmonary patient in the critical care setting, emphasizing specialized respiratory assessment, advanced ventilatory management techniques, basic interpretation of the chest film, hemodynamic monitoring, electrocardiograph interpretation, and the effects of cardiopulmonary disorders on the other major body systems. The care of patient and families will be studied with a special emphasis on culture, society and family dynamics in the intensive care environment. Ethics and ethical dilemmas will be explored in relationship to delivery of health care and critical care.

Prerequisite(s): RSP 210, RSP 202, RSP 201, RSP 112, RSP 111, BIO 106, ENG 102, RSP 110, RSP 102, RSP 101, ENG 101, PSY 101, BIO 105, and MAT 113

Corequisite(s): RSP 211 and RSP 212

4 lecture hours per week
3 credit hours

### SOC • Sociology

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>This course is an introduction to the foundation of the scientific study of human social life, to theories and methods of Sociology, and to such basic concepts as culture, society, social organization, social stratification, and social change. Prerequisite(s): ENG 096, if required 3 lecture hours per week 3 credit hours</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Social Problems</td>
<td>This course is an analysis of basic social problems, their causes and effects on society at large, and deviant behavior and social disorganization as exemplified by mental disorders, crime, drug abuse, sexual deviance, and suicide. Policies to deal with social problems are discussed. Prerequisite(s): SOC 101 3 lecture hours per week 3 credit hours</td>
</tr>
<tr>
<td>SOC 103</td>
<td>Gender, Culture and Society</td>
<td>Gender, Culture and Society is for students who are interested in the ways that biology and society’s expectations of males and females influence how people act. This course examines how popular culture, biology, history, the media, social institutions, and other factors such as gender and class influence the way we experience gender. Prerequisite(s): ENG 096, if required 3 lecture hours per week 3 credit hours</td>
</tr>
<tr>
<td>SOC 204</td>
<td>Women and Social Change</td>
<td>In this course students will learn about women’s roles and lives in different cultures; the history of women’s movements and activism; and terminology and controversial issues concerning research in the field of women’s studies. Women and Social Change is a course either for students who are majoring in Women’s Studies, or for those who want a general overview of the academic study of women’s issues. Prerequisite(s): ENG 096, if required 3 lecture hours per week 3 credit hours</td>
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<tr>
<td>SOC 206</td>
<td>Minorities in American Life</td>
<td>This course is a sociological investigation of the history and present status of minority-majority relations in American society, focusing upon ethnic, racial and religious minorities. Special attention is given to such issues as the origin of prejudice and discrimination and the tensions and conflicts inherent in inter-group relations. Possible resolutions are discussed. Prerequisite(s): SOC 101 3 lecture hours per week 3 credit hours</td>
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<tr>
<td>SOC 207</td>
<td>Social Inequality</td>
<td>This course examines the concepts of race, gender and social class and how they are manifested in social life. A number of socially relevant topics will be discussed including social class and power, racism, sexism and discrimination. In addition, class-based and gender-based social policy will also be examined. Possible resolutions to these and other issues are also explored. Prerequisite(s): SOC 101 3 lecture hours per week 3 credit hours</td>
</tr>
<tr>
<td>SOC 209</td>
<td>Introduction to Social Policy and Welfare</td>
<td>This course provides an overview of the development of and social policies for social welfare and assistance in the United States and abroad. A number of socially relevant topics will be discussed, including types of social welfare systems, public attitudes about social welfare policies, intersections of race, class and gender in social policy. In addition, there is discussion about the social work profession and private and non-profit sector social agencies. Prerequisite(s): SOC 101 3 lecture hours per week 3 credit hours</td>
</tr>
<tr>
<td>SOC 213</td>
<td>(PSY 213) Social Research Methods</td>
<td>This course explores the application of scientific methods to the study of human behavior and social interaction. The relationship between theory and research is examined. Students develop skills in understanding and using such techniques as case studies, surveys, experiments, participant observation, testing, and basic statistical devices to analyze data. Prerequisite(s): SOC 101 or SOC 103 3 lecture hours per week 3 credit hours</td>
</tr>
<tr>
<td>SOC 219</td>
<td>Gender and Work</td>
<td>This course explores how gender, race/ethnicity, and social class shape work. It offers students a guide to occupational development and helps students think critically about work in the past, the present, and the future. This course is taken as a diversity elective and an elective for the Psychology, Sociology and Social Services programs. Prerequisite(s): ENG 101 3 lecture hours per week 3 credit hours</td>
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<tr>
<td>SOC 273</td>
<td>Marriage and the Family</td>
<td>This course uses sociological perspectives to examine the diversity of families and explore the changing marriage patterns in contemporary society. The goal of the course is to help students develop a sound base for a successful marriage and healthy family. Prerequisite(s): SOC 101 3 lecture hours per week 3 credit hours</td>
</tr>
</tbody>
</table>
SPA • Spanish

▲ SPA 101 – Beginning Spanish I
This course includes development of the fundamental skills of understanding, speaking, reading, and writing. Listening practice is available. Media are incorporated into the classroom experience and web-based materials are a required part of the course. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106. Prerequisite(s): SPA 101 or two years high school Spanish
3 lecture hours per week
3 credit hours

▲ SPA 102 – Beginning Spanish II
This course is a continuation of SPA 101. Media are incorporated into the classroom experience, and web-based materials are required part of the course. Native speakers may not take elementary level courses in their native languages designated as 101, 102, 105, or 106. Prerequisite(s): SPA 101 or two years high school Spanish
3 lecture hours per week
3 credit hours

SPA 105 – Conversational Spanish I
This course offers development of ability to communicate orally in Spanish. Students who wish to take SPA 105 must have completed two years of high school Spanish or SPA 102, or must have the permission of the instructor. Fulfills one semester of the foreign language requirement. Not open to native Spanish speakers. Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

SPA 106 – Conversational Spanish II
This course is a continuation of SPA 105. Not open to native Spanish speakers. 3 lecture hours per week
3 credit hours

▲ SPA 109 – Spanish Grammar and Composition for Hispacnic
This course includes study of peculiar grammatical and syntactical problems that confront native Spanish speakers. Topics include spelling, accentuation, theme writing. Those who take this course are normally required to complete the language requirement (if any) by taking SPA 112 course or higher. This course fulfills one semester of the foreign language requirement or can be taken for elective credit. 3 lecture hours per week
3 credit hours

▲ SPA 111 – Intermediate Spanish I
This course provides review of fundamental skills of understanding, speaking, reading, and writing. Media are incorporated into the classroom experience and web-based materials are a required part of the course. Prerequisite(s): SPA 101 and SPA 102, or 3 years high school Spanish 3 lecture hours per week
3 credit hours

▲ SPA 112 – Intermediate Spanish II
This course is a continuation of SPA 111 or 3 years of high school Spanish. Media are incorporated into the classroom experience and web-based materials are a required part of the course. 3 lecture hours per week
3 credit hours

SPA 113 – Intermediate Spanish for Healthcare Personnel
This course introduces essential medical vocabulary and intermediate conversational skills in Spanish. Via a communicative approach it will recreate everyday situations encountered in work settings such as doctor’s offices, hospitals and emergency rooms. Multimedia and Web-based content will be used to develop and reinforce the ability to read, write, speak and listen in Spanish. Prerequisite(s): SPA 102, or three years high school Spanish, or native ability in Spanish
3 lecture hours per week
3 credit hours

SPA 115 – Spain: Its Culture and Its People (Foreign Study)
This course offers an introduction to Spanish culture and civilization, including geographical, historical, social, and economic factors. This course is offered in conjunction with a trip to Spain and fulfills one semester of the Spanish Modern Language requirement or may be taken as a free elective. 3 credit hours

SPA 116 – Civilization of Latin American Countries (Foreign Study)
This course offers an introduction to Latin American civilization. This course is offered in conjunction with a trip to Latin America and fulfills one semester of the Spanish Modern Language requirement or may be taken as a free elective. 3 credit hours

▲ SPA 121 – Advanced Spanish I
This course provides further development of skills in reading, composition and conversation. Prerequisite(s): SPA 112, or its equivalent 3 lecture hours per week
3 credit hours

▲ SPA 122 – Advanced Spanish II
This course is a continuation of SPA 121. Prerequisite(s): SPA 121
3 lecture hours per week
3 credit hours

SCM • Supply Chain Management

SCM 101 – Introduction to Supply Chain Management
This course is an introduction to the field of supply chain management and logistics. Topics covered include the roles and functions of purchasing, inventory control, physical distribution, transportation methods, and logistics. 3 lecture hours
3 credit hours

SCM 105 – Inventory Management
This course is an introduction to the inventory management and control. Topics include: inventory fundamentals, forecasting, demand, production systems, and inventory planning trends. 3 lecture hours
3 credit hours

SCM 110 – Logistics Technology
This course is a study of current technology generally used in supply chain management. Topics include creating spreadsheets, analyzing data and charts, creating databases, navigating tables, forms, queries, and reports. 2 lecture hours. 2 laboratory hours
3 credit hours

SCM 201 – Transportation Operations
This course is a comprehensive study of transportation as a critical ingredient in supply chain management. Topics include: terrestrial, air and ocean transport, risk management, planning/execution, and alternative transportation. 3 lecture hours
3 credit hours

SCM 205 – Purchasing and Supply Chain Management
This course is a study of the demands placed on purchasing and supply chain management. Topics include the ethical, contractual, risk management, sustainability, and legal issues associated with purchasing in supply chain management. Other topics include the influence on supply chain management by information system design, inventory, e-commerce, forecasting, and financial planning. 3 lecture hours
3 credit hours

▲ = Fulfills a General Education Requirement
SCM 210 – Operations Management
This course is a study of the concepts of operations which is an essential function in every business. Topics covered include: process design, service systems, quality management, ERP, inventory control, and scheduling.
3 lecture hours
3 credit hours

TRN • Translating
TRN 101 – Introduction to Written Translation
A general, introductory course that covers the theoretical and practical aspects of translating written text from one written language into another. Students learn what skills and knowledge are needed to become professional translators. They perform translations on a variety of documents. The emphasis is on translation into written English from any other written language although practice and feedback are given in the opposite direction as well.
Prerequisite(s): Completion of all developmental English and ESL requirements of the College. This is an online course
3 lecture hours per week
3 credit hours

UCC • College Success
UCC 101 – College Success
UCC 101 is a College Success course designed to create a supportive learning community by connecting students to each other, the college environment, and pathways to their future goals and careers. This course will explore the role of education in the construction of personal and cultural identities. Topics on current issues in society will be used to teach students effective study skills and cultural competence. This will help them develop career pathways. Students will learn how to clarify their interests, prepare for job applications and interviews, and utilize all college resources to get them to graduation.
2 lecture hours per week
2 credit hours

UPR • Psychosocial Rehabilitation
UPR 101 (PSRT 1101) – Introduction to the Principles of Psychosocial Rehabilitation
Enables students to identify the methods by which individuals with severe mental illness are helped in psychosocial rehabilitation and treatment settings. Classroom lectures and seminars provide students with opportunities to explore concepts unique to psychosocial rehabilitation, including history, philosophy and values of psychosocial rehabilitation.
3 lecture hours per week
3 credit hours

URS • Urban Studies
URS 101 – Introduction to Urban Studies
The course examines the variety of issues faced by the nation’s cities. It explores the historical development of the city, the city-suburban relationship, regional patterns, and recent developments which impact on the cities, as well as those institutions and processes which particularly affect the nation’s cities.
Prerequisite(s): ENG 096, if required
3 lecture hours per week
3 credit hours

WDW • Walt Disney World
WDW 297 – Internship I
This course provides an internship at Walt Disney World (WDW) in Orlando, Florida or Disneyland in California for one semester. Students must submit weekly journals and a final paper electronically to the WDW instructor. At the time of the required interview with Disney representatives, students must have a minimum GPA of 2.0. The student is responsible for transportation to and from Florida or California. Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Students must register for this course prior to the internship. Students may not register for Internship I and any Union County College co-op experience class or Internship II during the same semester.
Prerequisite(s): 2.0 GPA
200 contact hours
3 credit hours

WDW 299 – Internship II
This course provides an internship at Walt Disney World (WDW) in Orlando, Florida or Disneyland in California for one semester. Students must submit weekly journals and a final paper electronically to the WDW instructor. Students must also participate in a minimum of two Disney workshops. At the time of the required interview with Disney representatives, students must have a minimum GPA of 2.0. The student is responsible for transportation to and from Florida or California. Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Students must register for this course prior to the internship. Students may not register for internship and any Union County College co-op experience class or Internship I during the same semester.
Prerequisite(s): 2.0 GPA
300 contact hours
6 credit hours
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This catalog has been published by The Department of Academic Affairs and The Office of College Relations

Public Annual Notification

Non-Discrimination and Anti-Harassment Policy

Union County College is committed to maintain environments for all students, employees, and visitors that are free from discrimination and harassment. In accordance with State and Federal law, Union County College does not discriminate and prohibits discrimination on the basis of the following protected classes and/or characteristics, in all of its programs and activities, including but not limited to employment, promotion, admissions, and access to all career and technical programs: Race; Creed; Color; Sex; Gender; Pregnancy; Gender Identity or Expression; National Origin; Nationality, Age; Ancestry; Marital Status, Domestic Partnership, or Civil Union Status; Religion; Affectional or Sexual Orientation; Atypical Heredity Cellular or Blood Trait; Genetic Information; Liability for Military Service; Protected Veteran Status; Mental or Physical Disability (including perceived disability, AIDS and HIV related illnesses); Harassment (related to any of the foregoing categories); Retaliation for filing a complaint of, or participating in, an investigation of discrimination; and any other category protected by law.

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Effective August 1, 2019, the State approving agency, or the Secretary when acting in the role of the State approving agency, shall disapprove a course of education provided by an educational institution that has in effect a policy that is inconsistent the areas below:

NOTE: A Covered Individual is any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill benefits.

- Your policy must permit any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a “certificate of eligibility” can also include a “Statement of Benefits” obtained from the Department of Veterans Affairs’ (VA) website – ebenefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:
  1. The date on which payment from VA is made to the institution.
  2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

- Your policy must ensure that your educational institution will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual’s inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

Your signature on this document attests that your facility currently complies with the requirements of 38 USC 3679(e) effective August 1, 2019. Please ensure that policies in the next publication of your catalog, bulletin, or addendum align with all of the above requirements.

Name of Institution: Union County College

DVA Facility Code: 14915130

School’s website: www.ucc.edu

Additional criteria required? Yes or No (Please circle one) If yes – see page 2

Printed Name and Title of School Official: Demond T. Hargrove, Ph.D. Vice President for Student Development.

Signature of School Official: 

Date Signed (mo/day/year): October 29, 2019.
In addition, statute allows your policy to require the covered individual to take the following additional actions:

1. Submit a certificate of eligibility for entitlement to educational assistance no later than the first day of a course of education.
2. Submit a written request to use such entitlement.
3. Provide additional information necessary to the proper certification of enrollment by the educational institution.
4. Your policy may also require additional payment or impose a fee for the amount that is the difference between the amount of the student’s financial obligation and the amount of the VA education benefit disbursement.

If your educational institution will be requiring any of these additional actions by students, please provide this information electronically to the WSCA/SAA by November 27, 2019. You may cut and paste your school’s Policy to this document, or provide it as an attachment. You should also ensure that these policies are part of the next publication of your catalog, bulletin, or addendum.

Waivers of this requirement may be granted by VA. If you have a waiver, please send that documentation to the SAA so we may correctly document your compliance. VA will send communication about obtaining waivers at a later date.
College Office Hours
College office hours are 8:30 a.m. through 4:30 p.m. Monday through Friday during the regular fall and spring terms and 8:00 a.m. through 5:15 p.m. Monday through Thursday during the summer terms. Many Student Services offices have extended hours until 7:30 p.m. Monday through Thursday. The Advising Center, the Testing Center, and the Library have additional evening hours.

For the most current information, visit www.ucc.edu or call the specific Department to confirm the hours of operation.

CAMPUS MAIN TELEPHONE NUMBERS
Cranford Campus (908) 709-7000
Elizabeth Campus (908) 965-6000
Plainfield Campus (908) 412-3599

CRANFORD CAMPUS

ATHLETICS
Campus Center, (908) 709-7094

BOOKSTORE
Campus Center, (908) 709-7619

COLLEGE LIFE
Campus Center, (908) 709-7074
Email: collegelife@ucc.edu

PUBLIC SAFETY OFFICE
Student Development Building, SD 108 (908) 709-7152

STUDENT GOVERNMENT
Campus Center, (908) 709-7074
Email: SGA@ucc.edu

STUDENT SERVICES CENTER
Student Development Building
Helen E. Chaney Student Services Center (908) 709-7500
- Testing Center Email Address: testingcenter@ucc.edu
- Admissions/Records/Registration (E-mail: admissions@ucc.edu)
- Advising, Career, and Transfer Services (E-mail: advising@ucc.edu email: careerservices@ucc.edu)
- Disability Support Services (E-mail: disabilitysvc@ucc.edu)
- Dean of Students (E-mail: deansofstudents@ucc.edu)
- Educational Opportunity Fund (E-mail: eof@ucc.edu)
- Financial Aid (E-mail: FinancialAid@ucc.edu)
- International Student Services
- Student Accounts (E-mail: StudentAccountsOffice@ucc.edu)
- Veteran Student Services

ELIZABETH CAMPUS

BOOKSTORE
Kellogg Building, 1st Floor (908) 965-6068

COLLEGE LIFE
Kellogg Building, 1st Floor (908) 527-7202
Email: collegelife@ucc.edu

INSTITUTE FOR INTENSIVE ENGLISH
Lessner Building, 4th Floor, Room 414 (908) 965-6031
Email: iie@ucc.edu

PUBLIC SAFETY OFFICE
Lessner Main Lobby, (908) 965-6070
Kellogg Main Lobby, (908) 659-5159

STUDENT SERVICES CENTER
Lessner Building, 1st Floor 40 West Jersey Avenue Elizabeth, NJ 07202 (908) 965-6050
- Testing Center, Email Address: testingcenter@ucc.edu
- Admissions/Records/Registration (E-mail: admissions@ucc.edu)
- Advising, Career, and Transfer Services (E-mail: advising@ucc.edu email: careerservices@ucc.edu)
- Disability Support Services (E-mail: disabilitysvc@ucc.edu)
- Dean of Students (E-mail: deansofstudents@ucc.edu)
- Educational Opportunity Fund (E-mail: eof@ucc.edu)
- Financial Aid (E-mail: FinancialAid@ucc.edu)
- International Student Services
- Student Accounts (E-mail: StudentAccountsOffice@ucc.edu)
- Veteran Student Services

TRINITAS SCHOOL OF NURSING
Kellogg Building, 3rd Floor (908) 659-5203 Email: nursing@ucc.edu

PLAINFIELD CAMPUS

PUBLIC SAFETY OFFICE
Main Building Help Desk (908) 412-3595

STUDENT SERVICES CENTER
Logos Building 232 East Second Street Plainfield, NJ 07060 (908) 412-3550
- Academic Testing
- Admissions/Records/Registration (E-mail: admissions@ucc.edu)
- Advising, Career, and Transfer Services (E-mail: advising@ucc.edu email: careerservices@ucc.edu)
- Disability Support Services (E-mail: disabilitysvc@ucc.edu)
- Dean of Students (E-mail: deansofstudents@ucc.edu)
- Educational Opportunity Fund (E-mail: eof@ucc.edu)
- Financial Aid (E-mail: FinancialAid@ucc.edu)
- International Student Services
- Student Accounts (E-mail: StudentAccountsOffice@ucc.edu)
- Veteran Student Services
Welcome Students!

Union County College welcomes you.

We refer to this as a “Catalog,” but you can consider this your “On-Time Graduation Guide.”

Graduating on-time means earning the credits you need for a degree or certificate in less than three years. At Union County College, we are committed to helping you achieve this goal. Our faculty and staff do not simply pay lip service to our “Students are Number One” motto. We live it, we believe it, and we take pride in delivering on the promise of a great community-college education.

As you will see, the Catalog provides detailed information about what you need to know to be a successful student at Union. Please pay particular attention to the Academic Policies section, which outlines academic requirements such as grading.

The “Programs of Study” section provides a step-by-step roadmap for your chosen program of study. You will find over 60 academic programs from which to choose, as well as a semester-to-semester track to a degree or certificate.

Graduating with an Associate of Arts or Associate of Science degree at Union will enhance your opportunity to transfer seamlessly to a four-year institution, especially within the New Jersey system. Completing the requirements of an Associate in Applied Science degree will also help you to enter directly into a career when you graduate.

You are about to begin what we hope will be a successful year. We promise to do whatever we can to help you get started, stay on track, and achieve your individual educational goals. We have many resources available to help you succeed, from academic advising, assistance with financial aid, and free peer-to-peer tutoring in the Academic Learning Center. Your success is our success.

Thank you for choosing to further your education at Union County College as we continue our mission of transforming our community, one student at a time.

Sincerely,

Dr. Margaret M. McMenamin
President